

RURAL RECONSTRUCTION IN BURMA

BY

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WITH A FOREWORD

BY

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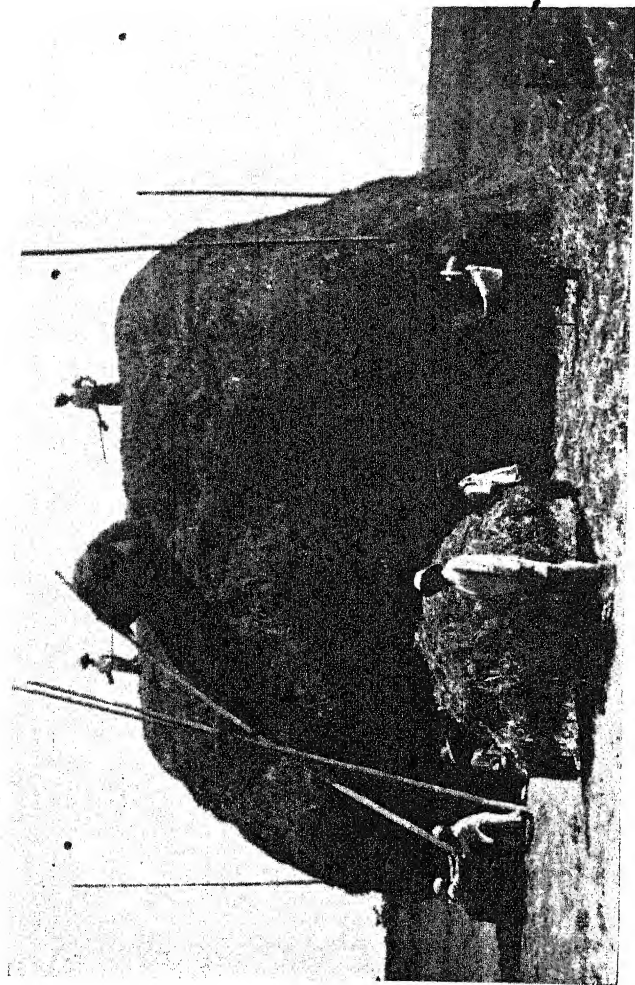
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Students of the Pymmana Agricultural School stacking straw. Rev. J. M. Smith is in the foreground.

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FOREWORD

I AM glad to have had the privilege of reading Dr. Andrus' interesting book, which comes at a very opportune time in the history of Burma. As Burma is embarking on new nationhood, innumerable problems, political, economic, social and educational will arise to demand the best efforts of all friends and lovers of Burma. As Dr. Andrus shows at the beginning of his work, there is an unlimited field for improvement in the village life of Burma. Our rural brothers and sisters often live in conditions of poverty and disease which should cause those of us who are more fortunate to give ourselves no rest until we have done our bit.

This book is welcome in that it indicates something which we can all do, in a practical way, toward uplifting rural life. We Burmans have sometimes been accused of being unstable in our ways, and lacking in abiding enthusiasm. But no critic, however unfriendly, can accuse us of lacking friendliness and idealism. In my contacts with the young people in our schools I have been struck, time and again, by the

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eager response to every challenge to unselfish service for this our native land. Vast resources of idealism and youthful vigour are waiting to be tapped and turned into constructive channels of rural betterment.

I believe that when the Village Improvement Society movement spreads to many villages of Burma our people will receive lessons in self-government which will enable this country better to manage its district councils as well as the central legislature. We are making a mistake if we concentrate all our attention on the final flower of Burmese life—the legislature in Rangoon. He who has not learned to walk should not try to run. He who has not learned, through the give and take of ordinary discussion and deliberation, to take part in the work of a village society or a council of elders or a co-operative society, will not be well prepared to do his share toward advancing Burma to the goal of self-government. Burma cannot be saved by a few leaders, however talented and devoted. She must be uplifted by the united efforts of millions of humble followers.

I am glad to see that Dr. Andrus and his eager young fellow-workers of Judson College

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have not confined themselves to speech-making and writing, but have gone into the highways and by-ways of Burma to take their message of sanitation, co-operation and better living to the people of this land. They have set a worthy example, and it is to be hoped that others will imitate them.

I am glad to learn that the head of one Rangoon High School is expecting to secure a number of copies of this book, sufficient to supply all his teachers, and to use it as a manual for the similar experiments to be undertaken by his staff and students. There is a great field for advancement here, and it is to be hoped that many other schools throughout the province will include village work as part of their programme. Often the brightest lads from the villages are to be found in the schools. They will be able to take groups of teachers and fellow-students back to their villages, to introduce them to their parents, and thus secure a more favourable hearing than could be found in any other way.

Government is already doing a great work, particularly through the Department of Public Health, but as Dr. Andrus indicates clearly in the closing portions of his book, it is only as

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public-spirited citizens in great numbers get under the burden that we can build up that greatest foundation of a greater and happier Burma—an ideal village.

August, 1936.

BA MAW

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INTRODUCTION

Burma, like her larger neighbours India and China, has experienced a quickened interest in rural reconstruction in the past five or ten years. City-dwellers demand an ever-increasing stream of lectures, newspaper articles and magazine articles on rural uplift. Unfortunately, most of those whose interest has been aroused stop before they actually go to the village to help in a practical way. A pioneer who has spent practically all his time in this work for thirteen years recalls a time when few were either interested in or sympathetic with this type of work. He expresses the hope that the present wave of interest will not subside, leaving little in the way of practical achievement.

It is the purpose of this small manual to appeal to the educated and generous-minded city-dweller, whether or not he considers himself an 'expert' in village uplift. (An expert has been defined as 'an ordinary man a long way from home', so anyone might be an expert

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to this extent.) Government, as will be shown in Chapter II, has done immensely more than have private individuals and agencies to solve the rural problem in Burma. The great need at present is for an army of volunteer workers, willing to undertake humble tasks and to rely upon the technical advice of experts, but who are able by their number and their unselfish devotion greatly to extend the work now being done. Chapters III and IV tell of what private agencies have already accomplished, but far the most important chapter is the last, with its practical suggestions to city-dwellers and to village teachers and landlords. Middle school and high school teachers, lawyers, clerks, landlords, physicians, religious workers and high school students living in the towns of Burma should be able to find many useful tasks awaiting them in villages near at hand. Government servants may also find rural reconstruction in nearby villages an interesting and enjoyable spare-time hobby. This book is *not* addressed to the professional rural worker or to the professional economist.

It will be seen that the purpose of this book differs considerably from the purpose of the splendid books on rural reconstruction in India

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written by Brayne and Hatch.¹ Mr. Brayne has been a Deputy Commissioner, and has had Government resources at his command. While private individuals may gain much inspiration from his books, even if they have little money to spend, these writings, particularly the first, are chiefly of interest to Government and to Government officers. Dr. Hatch and his talented wife undertook an intensive piece of work in a small area in South India, and with the help of a number of full-time workers, they have undoubtedly produced a revolution in the lives of tens of thousands. *Up from Poverty* should appeal especially to private individuals and organizations able to invest a few tens of thousands of rupees in salaries and equipment over a period of years, although many of the suggestions are of help to anyone interested in village uplift.

Dr. Hatch's wise formula for village uplift is: 'Self-help with intimate, expert counsel.' 'Self-help' because the avenue to any kind of

¹ F. L. Brayne: *The Re-making of Village India; Socrates in an Indian Village; Socrates Persists in India; and Socrates at School*. D. S. Hatch: *Up from Poverty in Rural India*. All are published by the Oxford University Press, Bombay. Those able to purchase only one of the above books are advised to secure *Up from Poverty*.

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permanent change is a change in the character and viewpoint of the villager. The unwise giving of alms may actually do more harm than good by destroying the willingness of the villager to do things for himself when the alms-giving ceases. 'Intimate' counsel is necessary because of the villager's deep-rooted suspicion of strangers. Wherever possible the volunteer worker should confine his efforts to one or two villages, because it will take all his spare efforts, in this limited field, to overcome the psychological barriers to improvement. One of our college students, on our first visit to a new village where it was proposed to install a masonry well, overheard the following whispered conversation :

First villager: Have they come to cheat us again?

Second villager: Who do you think they are?

First villager: I suppose they are the same townsmen who came last year and promised to give us a well if we would vote for them in the Circle Board election.

No amount of mere argument can change this conviction in the mind of the villager. But if the volunteer worker comes again and again; organizes games for children, brings Govern-

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ment and private experts to tell of means of improvement, supplies the villagers with back copies of newspapers and magazines and with other means of improving their lives, this suspicion will be gradually replaced by a trust and affection which will enable real progress to be made.

No doubt it is best to combine the 'intimate' counsel with the 'expert' counsel. However, the number of experts in agriculture, medicine, education, etc. is rather limited in Burma. There simply are not enough experts that they can spend their time becoming intimately acquainted with the villagers without neglecting the vast majority of villages altogether. Hence I should like to suggest a division of the field. Let the numerous volunteer workers take time to become intimately acquainted with their respective villagers and their needs, and then let them invite experts to pay occasional visits. The townsman can assimilate a vastly greater amount of expert advice at one time than can the villager, and in the succeeding weeks and months he can work along lines suggested by his expert adviser.

The problem is one which should be attacked simultaneously from many different angles.

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Consider for a moment the inter-relation of education, health and productivity. The villager keeps his children out of school because he is poor. Lack of education leads to superstition (or perpetuates it) and to unhygienic living and disease. Disease lowers the earning power of the villager, making him poor, and so on in a vicious circle. An improvement in one of these three aspects is likely to cause sympathetic improvement in the other two, but the wise rural reconstructor will study the needs of his chosen village and work out a programme of improvement in several departments of life simultaneously.

Since the present study attempts to indicate practical means by which non-professionals may help in the betterment of rural life, no discussion is given of two fundamental problems which affect and will affect rural life. The first is the population problem, and the second the fundamental organization of society, whether feudal, capitalistic, socialistic, etc. Interesting as these problems are to the author and to some, perhaps, of the readers, they are not problems which, at the present time, can be tackled successfully by the lay worker. The second problem is that of land tenure and

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the credit system. Only a few practical aspects of this problem have been selected for discussion.

The Burman who reads the books mentioned above must be struck by the fact that Burma is much more fortunate than India with respect to the gravity of the social problems needing improvement. Extreme poverty and overpopulation are much less serious in Burma than in India. While university education is less general, illiteracy in Burma is a very much smaller problem, both for men and for women. Burmese women do not suffer from backward social customs to anything like the extent pictured by Brayne and Hatch. Burmans are no doubt more addicted to violent crime than Indians, but litigation, so frequently mentioned by Mr. Brayne, seems to present less of a problem in Burma. The problem of lack of ventilation and of light in houses, so prominent in descriptions of Punjab villages, is a minor one in Burma. Few dwellings are noticeably unhygienic in these respects save those inhabited by some Indian immigrants and by Lisus, Kachins, Red Karens and some other hill tribes. Well-forested and not overpopulated Burma does not need to use dung-

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cakes for fuel, and overcrowding in villages is the exception rather than the rule.

Village uplift is certainly an 'art' not a 'science'. Human relationships are central, and few if any hard and fast rules of procedure can be applied generally. One will hardly ever find two villages with precisely the same problem or best helped by the same technique. Preparation and previous planning are helpful, but ability to adapt oneself on the spot is probably the greatest essential, along with common sense and sympathetic understanding of the villagers. The psychological problem cannot be exaggerated. Those with an unselfish attitude, and personalities which enable them to win the confidence of the villagers, will accomplish more uplift than 'experts' who lack these personal qualities.

An attempt has been made to include all rural reconstruction projects in Chapter III. Inevitably there have been some omissions of projects which deserve mention. The author will be grateful to anyone who will call his attention to such unintentional oversights, and will attempt to make amends at a later date.

CHAPTER I

THE CHALLENGE

THE town-dweller in Burma seems to consider himself much more fortunate than his village cousin. The ambitious village boy seems to share this opinion, judging by the alacrity with which he hies himself to the town at the first opportunity. One of the basic difficulties with village life, from the urban point of view, is the lack of mental and moral stimulus. How many a boy has returned from a busy intellectual life in the town with good intentions of studying while in his village home, and has found that the tempo of village life is such as to prevent serious mental effort! How many young men have attended courses in agriculture and have returned to their villages with high hopes and resolves, only to be pulled down to the level of village life by the inertia of community custom and lack of mental stimulus!

Intellectual Stagnation

According to the 1931 Census the percentage of literacy in Burma proper was 56

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for men and 16.5 for women, as against percentages of 14 and 2.3 respectively in India. Yet Burma lags far behind what should be the aim of every ambitious citizen—universal free and compulsory elementary education. Furthermore, the majority of those whom the census enumerators classified as literate had left school during or after the primary course, had failed to subscribe to a newspaper or magazine, or to purchase books, so that literacy had become an asset of very doubtful value. Teachers in village schools who have any training have probably been trained in some large urban school, where the whole outlook was urban. Hence, upon their return to village teaching they lack the training which would enable them to relate the subject-matter to village life and uplift. Subject-matter and illustrations are chosen from town life, so that at this early stage the attention of the ambitious youth becomes centred on a future career in the town. The type of teaching so splendidly illustrated in *Socrates at School* seems the rare exception.

The Burmese newspaper with the largest following boasts a circulation of a little over 12,000 and its nearest competitor perhaps two

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thousand less. My experience has been that most Burmese villages receive one copy each of the *Headman's Gazette*, and no other periodical whatsoever. It is a question whether even the headman reads this lone publication! The farmer's magazine, dealing with improved crops and methods, so prominent in the rural homes of Europe and America, is conspicuously absent in Burma.

Much of Burma's literacy is due to the universal hpongyi kyaung, which, with a few exceptions, does not appear to make any pretence at improvement of the village in respect of health and economics, having a totally different purpose in view.

Lack of Community Spirit

The townsman who goes to the village and asks if there is not some way in which the village can be improved, will probably receive an affirmative answer. Many 'progressive' villagers would like to borrow money from him for purchase of land, cattle and other worldly goods. But when the field is limited to things which the villager can do for himself, the response is much less cordial. The villager, in most cases, simply does not appreciate the

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possibility of improvement other than the receipt of monetary and similar aid from the outside. Many if not most of the possible avenues of improvement lead to community action. A community spirit seems to be noticeably absent. The Burman villager is an individualist, seldom trying to improve such a vague entity as his village, without a definite personal reward, and never expecting others to act differently. It is but natural, therefore, that the townsman who comes and says he wishes to help should provoke suspicion. Why should the villager not judge others by himself? After working in one village for a time we secured funds from the Deputy Commissioner for the materials, and skilled workmen for a masonry well. Most of the villagers had come to trust us and to understand our motives. But their headman, living in a village two miles distant, advised them to be very cautious, for surely we were going to make them pay us money, or otherwise cheat them, before the business was finished. In such a social environment those who attempt to stimulate community effort find the burden of proof definitely on themselves.

It should not be forgotten that improvement

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often means experiment, and that a large proportion of experiments end in failure. A poverty-stricken villager is not in an advantageous position to try unproved experiments, when he is living so close to the poverty line, or perhaps to the edge of starvation itself.

Does Religion help to stimulate Social Service?

Religion should be an aid to unselfish community service of the type discussed in this book. Yet it has been used by many as an excuse for idleness. We have found people of different religious faiths who are alike in holding that spiritual matters are so much more important than minor items like health and wealth that the latter can be ignored. Fortunately, there are well-informed leaders of all the important religious communities of Burma who take a more balanced view. Religious leaders may, however, find a definite challenge in the need of putting the dynamic of their religious faiths behind the effort to improve the life of Burma's rural millions.

The Silk Longyi Complex

The final difficulty with the social and moral environment of the village is the 'silk longyi

complex'.¹ The boy from the village school who stands at the head of his class, and who might in the future do wonders in the improvement of his village, is expected to take the scholarship examination, go to the town school and join the government service at the earliest satisfactory opportunity. The village is thus constantly drained of the best means of self-help.

The Challenge of Ill Health

We thus find that the challenge has a mental aspect and a moral and social aspect. It also has a health aspect. The death rate of 30 per 1000 in urban areas is so much greater than that of 19.38 in rural areas that we can hardly call this a particularly rural problem. But when we compare these rates with the rates of 10 to 13 reported by western countries, we can readily appreciate the need for improvement. More than two-fifths of these rural deaths are ascribed by those reporting them to 'fevers'. The Public Health Department cannot say definitely how many of these deaths

¹ The western equivalent would be the 'white-collar complex', meaning an unreasonable preference for jobs enabling the workers to wear white collars.

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are due to malaria, and how many to other fevers, but there is little doubt that malaria holds first place, both as a direct cause of death and as a means of weakening the system so that it falls a prey to some other disease. It is distressing to think that the Burmese *sésaya* has recently invented the disease 'metkalaung' for what is really malaria, and by insisting on his own quaint treatment instead of quinine is definitely making matters worse. One can hardly blame the villager for believing the *sésaya*, for Burma's relatively few doctors are almost never available to the villager, without a trip to a large town, whereas the *sésaya* lives in the village and will accept as fees what the villager can pay. The challenge here is to make modern medical service really available to the villager. After fevers come tuberculosis, respiratory diseases, dysentery and diarrhoea, cholera and smallpox, in that order of importance. It is to be noted that all these diseases except tuberculosis and respiratory diseases have been practically eliminated from western countries, by the practice of modern medicine and public health. Tuberculosis and respiratory diseases have been reduced to minor importance in some of the most advanced

countries. The challenge to Burma is to conquer these diseases also. Gardening and more and better food could undoubtedly build up resistance to tuberculosis. Provision of proper latrines and measures against flies could easily reduce the incidence of bowel diseases. Boiling of drinking water and use of masonry wells could reduce the suffering from cholera immensely. Vaccination has already reduced small-pox to fifth among the diseases, and continued progress is to be expected, now that many District Councils are making vaccination compulsory. It must be borne in mind, however, that a compulsory vaccination law, even when coupled with an adequate staff, can achieve its best results only when all the people are convinced of the necessity of vaccination and of periodic re-vaccination.

The Economic Challenge

Burma's villages present not only a mental challenge, a moral and social challenge, and a challenge of disease, but also an economic challenge. The extremely high infant mortality rate and also the high incidence of tuberculosis point directly at inadequate and insufficient food, or in other words, at poverty. It is

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an interesting experiment to walk through a Burmese village as the inhabitants are eating their evening meal, usually in view of the road. Ask each family what kind of curry is being eaten. In the typical village composed of tenants and farm labourers it will be found that the only curry used is leaves of trees or wild roots, etc., which can be secured free of charge. Villagers living close to a reserved forest or other jungle seem to have a variety of curries from this free source, but those living at a distance from such sources of supply are reduced to reliance almost exclusively upon rice and salt, or possibly *ngapi* for their diet. The Burman villager is quite fortunate in respect to housing, as he can ordinarily take a dah, find bamboos, and construct his own hut. He also seems to have sufficient coarse clothing to prevent suffering in this warm climate. However, when one goes beyond the barest minimum of subsistence, the Burman villager is strictly limited by his poverty and by the national habit of improvidence. Education, recreation, travel, literature—all the 'amenities' which make life worth living to the townsman are beyond his grasp.

People living in the towns of Burma and engaging in no more strenuous physical exercise than tennis sometimes refer to the long interval between the harvesting of the rice crop and the ploughing, and maintain that the Burman is rather lazy, or he would use his spare time to better advantage. Perhaps there is a measure of truth in the charge. But consider the diet and health of the average cultivator! Can he be expected to have a maximum of physical energy under these circumstances? And consider the fact that his methods and implements are usually of the crudest, so that nearly every operation requires a maximum of human energy and a minimum of scientific agriculture. Repairing of embankments, huts and implements necessarily consumes much time after harvest. I believe that the need is for a better direction of energy and for conditions which will give the cultivator more physical vitality, rather than for a greater expenditure of his present limited amount of energy.

It is well known that the rice farmers of Italy, Spain and Japan have outturns from two to five times as great as those of Burma. In Japan, at least, it is probable that more human

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labour is expended on an acre of rice land than in Burma, but certainly not in proportion to the output. Better seed, better implements and methods of cultivation, the scientific use of fertilizers and better marketing organization appear to be the four chief means whereby these competitors have out-distanced Burmese paddy farmers. As will be indicated in the following chapter, the Department of Agriculture in Burma has developed answers to all four of these challenges. The limiting factor is now the willingness of the farmer to accept the expert advice being proffered.

An extreme example of the farmer's lack of understanding of the importance of good seed is furnished by the history of potatoes in the Shan States. The crop was introduced within living memory. The Shans soon discovered that large potatoes fetched higher prices than small ones. It therefore occurred to them to sell the large potatoes and keep the less valuable ones for seed! Of course the average quality of Shan potatoes has deteriorated greatly. No such negative selection seems to be going on with regard to the other crops, but apart from the work of the Department of Agriculture little if anything seems to

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be done to *improve* the average quality of seed.

Small Use of Improved Methods of Agriculture

Inquiries in an ordinary Burmese village sometimes elicit the information that one or two *theikpan* (soil-inverting) ploughs are in use, or have been used and discarded, but that the ancient, inefficient plough continues to function in about the same manner as in the days of Alaungpaya.

One would need to be a diligent searcher to find a village in which the cattle dung is stored in a proper compost pit, along with straw and waste material, and protected from rain.

Opportunities for Gardening and Diversified Farming

In dozens of villages the writer has observed considerable bare spaces about the houses, quite suitable for gardens in every way, but serving no useful purpose. Well water for irrigation, fertilizers and the spare time of various members of the family could easily be combined to produce vegetables which would provide a more healthful diet and perhaps even contribute to the money income of the family.

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Agricultural experts have as yet found no other crop as suitable for Lower Burma as a whole as is paddy. However, it appears that paddy is also grown in many areas of Central Burma, and on higher and less suitable land elsewhere, where maize, beans, cowpeas and similar crops could be grown to better advantage. From the records of the past several years at the A. B. M. Agricultural School at Pynmana, it appears fairly certain that with relative prices as they were in the years 1930-4, these leguminous crops would produce larger net cash incomes and would enrich the soil at the same time.

Possibly one reason for the greater popularity of paddy is that the villager can always, with no difficulty whatever (save in remote districts like Kengtung) find a buyer for his paddy. Furthermore, his familiar, primitive implements and methods with the crop are known to be fairly effective. Minor crops may or may not find buyers. In particular the progressive farmer who is first to introduce a new crop in an area may find grave difficulty in marketing until the new crop is grown in sufficient quantities to attract buyers from the larger markets. Even where some sort of marketing

facilities exists, the condition portrayed in the Department of Agriculture's booklet *Marketing of Crops in Burma* leaves much to be desired.

The Curse of Absentee Landlordism

Finally, Burmese agriculture has suffered increasingly from the absentee landlord system. Seventy per cent of Burma's land is now owned by agriculturists, but the other 30 per cent is undoubtedly of higher average fertility. In 1901-2 over 86 per cent of Burma's land was owned by agriculturists. Turning to Lower Burma we find that while agriculturists owned 76 per cent of Hanthawaddy's occupied area in 1901-2, they had lost all but 35 per cent of the land by 1933-4. Almost equally bad results can be noticed for most of the twelve other rice-growing districts of Lower Burma. The depression has accelerated the passing of land into the hands of money-lenders and others, but absentee landlordism is not a recent problem. Every five-year period since statistics became available in 1901-2 has witnessed the steady loss of land by farmers. Unfortunately the landowner who spends his time far from his holding has

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little or no interest in the advancement of the welfare of the villagers. On the other hand, his attempts to secure the largest possible income from the competitive bidding of prospective tenants leaves the tenants with no surplus for experimentation. Furthermore, this system prevents either landlord or tenant from having the sentimental attachment to the land which is so valuable an ally of progress in some countries. After from one to three or four seasons, the tenant usually leaves to try his luck elsewhere. When he does not expect to stay on a particular farm for another season, one can hardly expect him to exert himself in the application of fertilizers and in other projects whose benefits would accrue chiefly to the landlord.

The minority (in Lower Burma) of farmers who own their land are heavily indebted to Burmese and foreign money-lenders, and are paying rates of interest which are uneconomic, and which will mean eventual foreclosure in many if not most cases. Yet thrift is not a virtue which is valued highly, and not many tenants save up sufficient money to buy land outright, avoiding debt. Enormous social and psychological changes are needed before the

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Burmese farmer will possess the thrift and careful management to escape the evil results of high interest rates and improvident borrowing.

We thus see that the person who considers thoughtfully the real conditions of the Burmese village—intellectual, moral and social, sanitary and economic—will observe many things which prevent his rural brother from having the full and healthy life which should be his. He will further observe that many of the evils are brought about by conditions which can be improved, and which are being improved, here and there. It is the author's hope that many who read this book will be inspired to answer the challenge in their own way.

CHAPTER II

GOVERNMENT'S REPLY TO THE CHALLENGE

Government Schools

The past century has witnessed an almost constant increase in the funds spent by Government on education (if we except the period since the beginning of the present great depression, during the course of which education has received staggering cuts). Government high schools have been set up in practically all district headquarters not adequately served by existing schools. Government subsidies and building grants have been given, either through the Provincial Government or through municipalities and district councils, to a very large number of primary and middle schools situated in areas in which they could serve the rural population. With the financial support thus given has gone the efficient supervision of the Department of Public Instruction, which has tended to pull up the standards of the weaker schools and to co-ordinate the different units of Burma's system of education.

Will Government Schools have a Rural Bias?

As indicated in the previous chapter, this system of education is urban-centred, and does not contribute as much to village uplift as do the schools of Denmark and some other countries. It is gratifying, therefore, to note that the Education Department has appointed a committee which held many sittings in 1935 and 1936 to consider possible changes in the primary, middle and high school systems of Burma. Mr. A. Campbell, the Assistant Director of Public Instruction, was chairman of this committee, which visited a number of the Rural Reconstruction projects mentioned in the following chapter. The inclusion of Rev. B. C. Case in the committee is proof of the Department's desire to give rural education careful consideration. The Campbell Report is a masterly attack upon a difficult problem. Its stimulating comments and far-reaching recommendations should be studied carefully by all those interested in the problem of village uplift in Burma.

Government Cannot Attack the Moral Problem

In Burma, at least, the moral aspects of village improvement seem inextricably bound

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up with religious factors. Because of its very wise policy of complete religious neutrality, Government seems unable to make a very positive contribution toward the solution of such problems as community selfishness, distrust and dishonesty, save the negative contribution of providing a system of law and a police force. Government also permits pupils to receive instruction in their own religion, while attending Government schools. Beyond such measures the spiritual and moral uplift must be undertaken by private agencies. It is gratifying to note that a few forward-looking hpongyis, such as U Parama of Htantabin (Kamayut), are applying their religious principles to the improvement of community life. Many Christian missionaries and representatives of other religions are working along similar lines, but a great deal more must be done before the moral handicap to village improvement is removed.

Hospitals and the Public Health Department

Government's answer to the challenge of disease has been a system of Civil and Railway Hospitals and a well-organized Public Health Department. The hospitals are, of course,

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situated in the larger centres, and do not minister very greatly to village health, although a small proportion of the serious illnesses in the village do result in visits to the hospitals.

The Public Health Department is much more concerned with rural health. Unfortunately the depression has been a lean time for this department. Only Akyab, Myaungmya and Pyapon Districts have full-time Public Health Officers, in other cases the Civil Surgeons being also part-time Public Health Officers. As might be expected, the Civil Surgeon usually has his time fully occupied with his hospital, and can spare but little attention to touring or otherwise assisting in the improvement of village health.

Prevention of Epidemics

The outstanding service of the Public Health Department is the prevention of epidemics. Before the coming of modern medicine, Europe and Asia witnessed epidemics which, like the Black Death, swept away as much as half of the total population. Every year, in almost every district of Burma some epidemic starts which, were it not for the work of the Public Health Department, might carry off tens of

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thousands, or even more. Smallpox, formerly so devastating in most countries, has been brought under control in Burma by the same methods which have almost eliminated it from many western countries. Vaccinators are constantly busy, particularly where an epidemic threatens. Numerous Public Health Inspectors carry vaccines with them on their district tours. 1,527,027 persons were vaccinated during 1934, mostly by rural vaccinators. Inoculations for plague and other diseases are quickly made in an area which is threatened by an epidemic. The registration of deaths, with the help of headmen, helps in the detection of an incipient epidemic.

Excellent Propaganda Work

The Public Health Department has shown a truly remarkable zeal in carrying its propaganda work to the villages. The following is a quotation from the 1934 Report on the Public Health Administration of Burma :

The public health staff in rural areas gave 5,933 lectures or health talks, 175 magic lantern and nine cinema demonstrations to audiences estimated at 362,865. In addition, 88,531 copies of health publications on various subjects were distributed. The districts of Akyab, Insein, Hanthawaddy, Bassein,

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Myaungmya, Maubin, Meiktila and Myingyan deserve special mention for the large number of lectures delivered.

In 1935 the Public Health staff in rural areas gave 9,337 lectures or health talks, 261 magic lantern and 4 cinema demonstrations to audiences estimated at 733,120. They distributed an even greater quantity of literature than in the previous year.

The Public Health Inspector is a very important part of the Public Health administration. Besides assisting in vaccination, inspecting records of births and deaths and giving lectures and lantern demonstrations, he also assists in such work as chlorination of wells, to protect drinking water against cholera germs.

From 1932 to 1936 the post of Hygiene Publicity Officer was filled by Dr. U Tha Saing, a most energetic young Burman, with unbounded enthusiasm for his work. In 1934 he visited 21 towns and 38 villages, gave 23 ordinary and 104 lantern lectures and 124 cinema demonstrations to audiences estimated at 87,844, besides distributing tens of thousands of pamphlets and assisting in baby shows and other special exhibitions. In 1935 he concen-

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trated on village work more than previously. Hence his audiences were smaller. Very likely he reached a much needier class of people, however. The Department has published a total of 123 Public Health leaflets, thirteen posters, and a number of cards and handbills. A few lectures are available for distribution to people competent to make use of them. This literature is mostly in Burmese, but partly in English, and has been used extensively in many schools.

A hopeful development under the Public Health Department is the Burma Health School, started in January, 1935, with an adequate staff of lecturers and nine students, four of the nine being nominated by Rangoon Corporation. It is hoped that a much larger student body will be enrolled as the work of the school becomes better known, and that health visitors who graduate from the school may find their way into an increasing number of the villages of Burma.

Hlegu Health Unit

The Rural Health Unit, Hlegu, was started in 1930 as a joint project of the Rockefeller Foundation, New York, and the Public Health

Department. Its activities cover one of the four townships of Insein District in an intensive manner. In addition, the Health Unit supplies bored-hole latrine equipment for use in any part of Burma or the Shan States. After an initial period of doubt and scepticism on the part of the villagers in Hlegu township, the Health Unit now seems to command the co-operation of most of the population. Bored-hole latrines to the number of 1,828 had been installed by the end of 1935, usually with the help of contributions from the householders benefited. Health lectures were very numerous in this area, and school health inspection was done very thoroughly and accompanied by the teaching of health habits to children. 67.6 per cent of the population was vaccinated in the first six years of the Unit's activities. Assistance is given to two leprosy clinics. Larvivorous fish are bred and distributed to the tanks and wells of the township. These tiny fish feed upon the eggs or larvæ of mosquitos, and thus assist in combating malaria. Nurses and midwives keep in intimate touch with the villagers, and many expectant mothers attend the weekly pre-natal clinics. In 1936 Government took the step of extending the

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activities of the Unit to the other three townships of Insein District.

Department of Agriculture

Government's chief answer to the economic challenge in the village has been the Department of Agriculture. Whereas the 1934 expenditure of the Public Health Department was Rs. 59 lakhs for towns and Rs. 8 lakhs for the districts, the Department of Agriculture is concerned almost exclusively with the agricultural village. The work of this Department is carried on by a small central and specialized staff, such as the Director, the Marketing Officer, the Agricultural Chemist, the Economic Botanist, the Mycologist, the Entomologist and the Rice Research Officer, and by the eight Deputy Directors of Agriculture and their assistants. Each Deputy Director is in charge of a circle. The eight circle headquarters are Rangoon, Bassein, Akyab, Moulmein, Pyinmana, Magwe, Meiktila and Mandalay. Each circle has a central experimental and seed farm. These farms, respectively, are located in or near Hmawbi, Myaungmya, Akyab, Mudon, Pyinmana, Allanmyo, Mahlaing and Mandalay.

*Experimental Farms, Seed Farms and
Demonstration Plots*

Anyone visiting one of these farms, particularly the splendid farm at Hmawbi, must be struck by the infinite patience and considerable skill with which the plant breeding is carried on, and such superior strains as Emata A28-8 made available to the cultivators. When a successful new strain has at length been developed, it is grown on the central farm and on the twenty-three seed farms, for sale to the public. The ultimate success of this work, therefore, depends upon the extent to which the cultivators take advantage of the help offered them. Improved seed during 1934-5 seems to have been distributed more widely in the Southern Circle (Rangoon and Hmawbi) than in any of the others, largely because in this circle private growers distributed an even greater quantity of the pure seed than did the departmental officers. One-seventh of all the paddy grown in the Southern Circle (covering much the same area as the Pegu Division) is now from improved seed. In the East Central Circle (Pyinmana) also, the *akyozaungs* or honorary seed distributors were busy, 35,000

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baskets of pure seed having been sold by them in one year, as against 7,000 baskets sold by the seven Government seed farms in that circle. The twenty-three seed farms are in charge of Senior Agricultural Assistants. These officers also have general supervision over the 2,182 demonstration plots. It is interesting to note that with regard to rice, in particular, the Department of Agriculture not merely developed the improved strains and persuaded many growers to use them, but has also been active in persuading millers to pay a premium of Rs. 5 to Rs. 10 per 100 baskets for the superior rice. This premium, unfortunately, is not yet paid in most rice-producing areas, but where it is paid it seems to furnish by far the most persuasive argument which can be brought to bear upon the cultivator.

Seventy-seven cultivators' leaflets have been issued, in Burmese, by the Department of Agriculture. Some of these are out of print at the present time, but large quantities of the remaining leaflets are distributed annually. The *theikpan hte* or soil-inverting plough is supplied to cultivators by the Department officers at a cost of Re. 1-4 to Rs. 2, and nearly 5,000 per year are being supplied. Less

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than 300 plough bodies per year are sold, as local carpenters are encouraged to make these. Harrows, seed drills and sugarcane crushers of improved design are also sold in small numbers by the Department. A considerable number of improved implements are sold by private firms under Departmental encouragement.

- The place which vaccination and the magic lantern hold in the public health work seems to be held by the demonstration plot, with regard to agriculture. In every circle, plots of from half an acre or less to three or four acres are cultivated according to departmental instructions, demonstrating fertilizers, seeds, implements or methods, or more than one of these improvements at the same time.

Senior Agricultural Assistants make frequent visits to villages and deliver lectures, also showing samples of seed and implements. Of recent years this important service has had to be curtailed somewhat, owing to lack of funds for travel.

Farm Schools

Some of the experimental farms, including Hmawbi, Mahlaing, Pyinmana, Mudon, Allanmyo and sometimes Akyab, give courses

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of from six weeks' to nine months' duration, to selected cultivators and cultivators' sons. In certain cases a stipend of Rs. 10 per month appears to cause a large number of candidates to apply for the course. Good reports are given of several of the graduates of these special courses, as they have introduced the improved methods into their own villages. •

The Department had, at one time, an Agricultural College at Mandalay, with splendid buildings and equipment. When the cadre of Senior Agricultural Assistants was complete, and graduates could not expect Government posts, the College was obliged to close for lack of students. It is regrettable that Burma's large landlords are not sufficiently wide awake to send their sons to such a high class institution, as do the landlords of England, America and other countries.

Co-operative Department

The Co-operative Department is a branch of Government from which great things have been expected in the past. As is probably known to all readers of this book, co-operation in Burma received a serious set-back if not a fatal blow with the failure of the majority of

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the primary societies and of the Burma Provincial Co-operative Bank, Mandalay, during the course of the depression. A well-informed official of another department told me recently that a very certain means of gaining unpopularity in the portion of Upper Burma in which he had been stationed was to admit connexion with the Co-operative Department. The extensive foreclosures which the Department has been forced to undertake have of course left a trail of bitterness, even though an outside observer could not blame the Department for this obvious action.

Moral and Intellectual Background Necessary for Co-operation

It is exceedingly unfortunate that co-operation was extended so rapidly in Burma, without the inculcation of co-operative principles and ideals into the minds of the members. Certainly co-operation *has* benefited farmers of many western countries, and *could* benefit farmers of Burma, given the proper mental and moral conditions among the membership. In recent years the Co-operative Department has unfortunately been obliged to devote its efforts chiefly to the sad task of winding up

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defunct societies. In the past two or three years the Department has assisted in the organization of co-operative marketing of paddy, two rice mills having been purchased for the purpose. The Department has had to take over many thousands of acres of land and, with the aid of the Department of Agriculture, improved methods of agriculture are being developed, the Sittang Colonies being prominent in this regard.

Cottage Industries

Although large-scale industries have all but eliminated cottage industries from western Europe and America, the general standard of living in Burma is so low that it might be improved by a supplementary income from such handicrafts as weaving, lacquerwork, pottery, woodwork and metalwork. The Cottage Industries Department maintains the splendid Saunders Weaving Institute at Amarapura, where the use of the flying shuttle and other improved devices is taught. There is also a school for lacquer workers at Pagan, the Burma centre of this interesting industry. The pottery portion of the Department has been retrenched. Efforts are made from time

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to time to develop a foreign market for such Burma handwork as lacquer.

Veterinary Department

The Veterinary Department has a function similar, among the cattle and other animals of the province, to the function of the Public Health Department among human beings. It is particularly active whenever an epidemic threatens. Unfortunately retrenchment has necessitated the discontinuance of the distribution of cultivators' leaflets.

Other Activities

The Public Works Department, District Engineers and similar technical organizations and officers render such valuable services to the rural areas as the construction and repair of roads, an elaborate system of bunds, to prevent the flooding of the Delta, and an extensive system of irrigation works in Upper Burma.

Early in 1935 the Local Government was notified that it would receive a sum of Rs. 5 lakhs as Burma's share of the amount allotted by the Government of India for rural uplift work.

After consulting with the various heads of

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Departments concerned, the Local Government has opened a Rural Uplift Centre at Tatkon in Yamethin District. The work at this centre is being undertaken by representatives of the Agricultural, Public Health, Education and Veterinary Departments, and started in July, 1936. Dr. Tha Saing has been chosen to inaugurate the Public Health portion of the centre. It is proposed to open two more rural centres in the comparatively near future—their exact location has not been settled but one will almost certainly be at Hmawbi in Insein District.

It is reasonable to anticipate that considerable benefit should result from the activities of these centres.

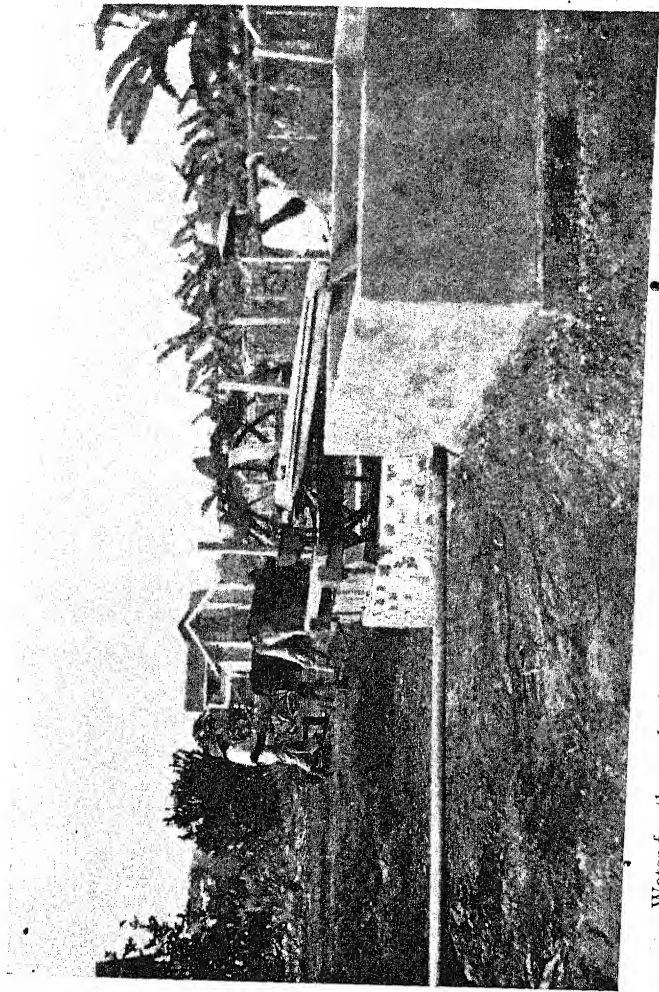
CHAPTER III

SOME PRIVATE AGENCIES IN RURAL RECONSTRUCTION

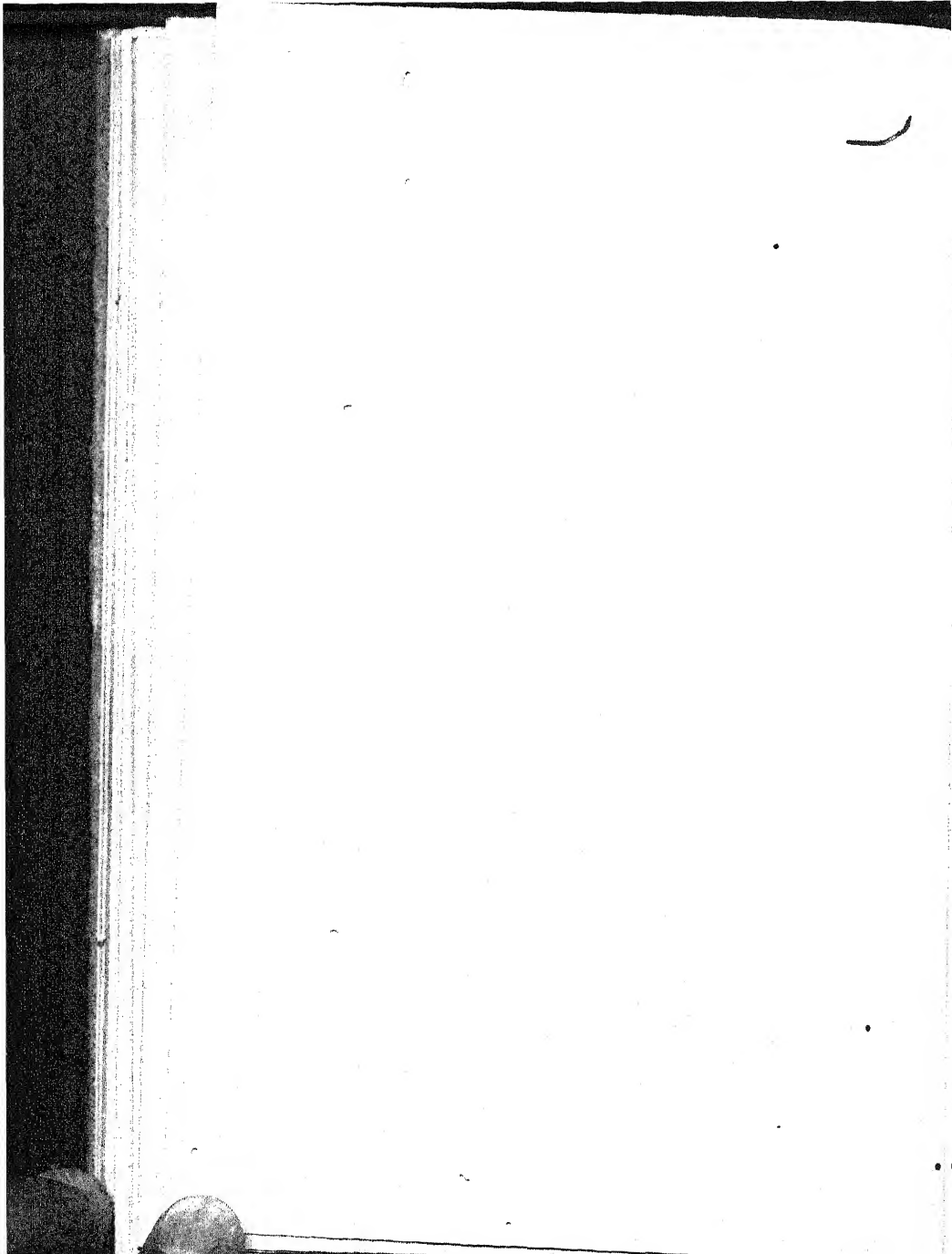
A. B. M. Agricultural School, Pyinmana

•Turning to rural reconstruction by private agencies, the A. B. M. Agricultural School, Pyinmana, under the leadership of Rev. Brayton C. Case, B.Sc., M.A., K.I.H., is undoubtedly the outstanding institution in the province. The school was opened in June, 1923. 492 students have enrolled since that date, of whom 122 have completed the four-year course. The object of the school, according to Mr. Case,

is to train people to practise farming and marketing more successfully and to live a fuller life in the village. In order that village boys may enter, only vernacular primary educational qualifications are required. Any boy of good character, strong and well, with industrious habits, over fifteen years old, who has a fourth standard education or its equivalent, may be admitted . . . The teaching is applied to practice, and about half the school time is spent working on the demonstration farm, for which wages are paid. In addition, students carry on agricultural projects of their own where they put



Water for the garden in the cold season would enable many villagers to keep busy, increase their income, and have better food. Villagers could co-operate to install a Persian wheel water lift like this one at the Pyinmana Agricultural School.



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into practice what they have learned, and the profit or loss goes to their personal accounts.

The school aims to give the students a working knowledge of the best practices in agriculture, and instil power to live a satisfying and useful life in the village. It attempts to produce village workers with zeal for service, who will create an environment in which the village cultivators around them will be willing to receive and put to use the advice and help for improvement offered by Government and private agencies. With this in view, while yet in school the students are encouraged to go out and teach village people improved practices. Through the Extension Department, the school continues its contact with those it has trained and helps them to become demonstrators of improved practice in the village to which they return.

The demonstration farm includes 140 acres devoted to field crops, 7 acres to fruit orchards and 14 acres to vegetable gardens. Mr. Case's colleagues in the school include Rev. J. M. Smith, B. Sc., and Mr. W. M. Cummings, B. Sc.

A certain amount of experimental work is done, particularly with regard to the costs and profit of various beans, maize and other alternatives to paddy. However, Mr. Case and his colleagues utilize the results of Government Experimental Farms to a much greater extent, and depend upon them for accurate data on comparisons of varieties and cultural methods.

The school not only keeps a close liaison with the Department of Agriculture, Burma, but also interprets to Burmese students and farmers the results of a mass of experiments gleaned from the reports of experimental stations throughout the world.

The school keeps 400 chickens, 100 head of cattle and 100 pigs. The chickens and pigs are fine breeds imported from America (and indirectly from England in the case of the Berkshire pigs). The herds and flocks of pure-bred animals on the farm are kept up to a high standard, and breeding stock is constantly being supplied on sale to villagers. Because they have demonstrated their superiority over the indigenous breeds, there is an increasing and widening circle of demand for this improved breeding stock. The Karens and other non-Burman groups, as might be expected, are much more enthusiastic about the Berkshire pigs than are the Burmans. Mr. Case reports that the Berkshire boars which have been placed in Pinthaung and Chauk O Chin villages for two years have so changed the appearance of the pigs in those villages that the small, ill-formed Karen type of pig is no longer to be seen. Burmans

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whose religious scruples prevent them keeping either pigs or chickens find this school prepared to supply them with information, and sometimes with seeds, for gardening. A vernacular pamphlet, containing instructions for the planting and care of 37 kinds of vegetables, has recently been printed and circulated widely. Another pamphlet, *Better Cattle and Better Care*, has just been reprinted. They may be obtained at the A. B. M. Press for As. 2 and 1 respectively.

A Record Crop of Paddy

Other crops are being stressed more than paddy in the propaganda work of the school, because of the need for vegetables in a balanced diet, the need in many sections for diversification and rotation of crops, and because much land now in paddy is more suitable for cash crops and other food crops. Yet the main crop of the farm as of the province is rice. Every year since the establishment of the farm the yields per acre have been considerably greater than those of surrounding cultivators in the district. In the favourable year 1935, the paddy crops set a new record: 65.5 acres produced 3,803 baskets, an average of 61.8

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baskets per acre. The average yield in Burma is considerably less than 30 baskets per acre.

Rural Reconstruction is Interesting

Perhaps the reason that 60 per cent of the graduates have gone to work on farms with their own hands, and a total of 90 per cent have gone into some type of rural service is that the Pyinmana School makes village improvement an *interesting* occupation. Every student is taken on many short observation trips to neighbouring villages. Stops are made at bazaars and other places where a crowd can be collected. As entertainment features, such Burmese songs as 'The Golden Rose' and 'The Paddy Farmer' are sung, and appropriate dances are performed. Lectures are given on improved field and garden crops, improved ploughs, barred rock chickens and malaria. Of course seeds, chickens, and cinchona febrifuge tablets are taken on such trips for sale to the villagers. In 1933-4 there were many presentations of the drama 'Wealth from Waste', which showed the waste of organic matter in rubbish, waste of manure, waste of health, waste of time, waste of money and

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waste of human life and character, all of which might be used for the enrichment of village life. In January, 1935, a tour was made by launch in Maubin and Hanthawaddy Districts, with the graduating class. On arrival at a village the first item on the agenda was an inspection of the agriculture of the countryside, as a demonstration to the class and as a means of finding out how to give helpful advice. During the noonday rest periods, when the villagers returned from the fields, the brass band would play, after which lectures on various subjects would be given. Free medical treatment was given to sufferers from itch and other skin diseases, after which small packets of medicine were sold. Charts and demonstrations were prepared during the afternoon. The playing of the band, at dusk, would bring from 200 to 500 villagers in from the surrounding creeks and fields. Cholera was raging nearby, so lectures on the cause and prevention of cholera were well received. Disinfection of drinking water with permanganate of potash was demonstrated, and many packets of this chemical were sold until the supply was exhausted. An hour's drama and sleight-of-hand performance completed the

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programme, which usually terminated at about 11 p.m.

Agricultural Propaganda from Pyinmana to Bhamo

In February, 1936, I had the privilege of watching the start of a similar pilgrimage by land. The senior class of the school packed the motor car and trailer to overflowing as the procession left Pyinmana, with the band making some music and much noise. Livestock, seeds, literature and costumes helped fill every available inch of space. The trip included stops at Meiktila, Aungpinle, Mandalay, Maymyo, Hsipaw, Lashio, Muse, Namkham and Bhamo. The programmes of the meetings were similar to those described for the Delta tour of 1935. Special mention must be made of the Kachin village of Zaubum, where several hundred people from surrounding villages had erected a combination chapel-school and quarters for boarders with their own hands. Fields and gardens were attached to the school and tilled by the students, who raised a considerable portion of their own food. When the graduating student is thus brought face to face with the actual conditions of villages in

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Burma, with the possibilities of improvement, and with an intensive effort to stimulate the use of these improvements, it is only natural that he should wish to dedicate his life and efforts to rural uplift work. No doubt many of the bright lads who leave their villages for posts in the towns would be willing to remain behind and serve their own people were they to be trained for and challenged by such an opportunity for service.

In addition to the public health work described above, the Pyinmana Agricultural School owns a bored-hole latrine outfit, and has used the same very extensively. For instance, 60 latrines were put down in and around Tatkon. The School supplied the concrete squatting plates, while the villagers furnished the labour and the bamboo linings.

U Ohn Sein—From Opium Smuggler to Co-operative Leader

An unusually important part of the propaganda of the school is the out-station demonstration work. In this way the Agricultural School, like the Department of Agriculture, is enabled to reach the village community in

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a much more intimate way than would be possible otherwise.

'U Ohn Sein', writes Mr. Case, 'was a notorious opium smuggler of Lewe. From the plains to the Karen tribes on the Eastern Yomas thirty miles away the outposts extended of his underground system for getting opium smuggled in from the Shan States. He had a government opium consumer's license, under cover of which he could be in possession of small quantities without arrest. He bribed the police and hired gangsters to carry on the evil trade. He was a man slight of build but quick of movement and thought and decision. The neighbours in his village, although knowing his illicit means of livelihood, took him into their social and religious organizations, for he was making money.

'One day a gangster from a rival gang in the same illicit business of smuggling opium attacked him in the dark with a dah and nearly killed him. One shoulder was nearly hacked off and his skull cut open. He was taken to the Civil Hospital and recovered, but his left arm never regained full strength for work. He was partly crippled for life. His eldest son became addicted to opium and turned to petty thieving to gain what he craved for most. In 1932 a European forest officer was murdered by a gang of thugs, and as the murderer, who was at large in the adjoining forest, had some blood relationship to U Ohn Sein he was suspected and locked up by the police.'

He had heard Mr. Case with teams of agricultural students from Pyinmana preaching in the Lewe bazaar and had seen the barred Ply-

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mouth rock cocks and Berkshire boars placed for breeding in the neighbourhood.

U Ohn Sein, with abundant time for meditation, decided to give up his old means of livelihood, and lead an honest life henceforth. Upon his release he sought out Mr. Case, and told him of his resolve. He had his second son enrolled as a student in the Agricultural School. He entered the poultry business, selling through the Pyinmana Fresh Egg Association. He secured a Berkshire boar, and built up a big business, improving the local strain of pigs. He raised Imperial Spanish groundnuts on a sandy hill-top which he owned, near the village, and interplanted them with pigeon peas as recommended by Mr. Case. Finally, he turned over to Mr. Case his old government opium license book, signifying his determination to have nothing whatsoever to do with opium in the future. Mr. Case's story goes on :

'Three years have gone by since then. U Ohn Sein is chairman of the Lewe Co-operative Poultry Society and is helping those around him to increase their income by keeping hens and selling eggs. He is the leading pig breeder of that neighbourhood and the Pyinmana breed is found in many surrounding villages. He is the demonstrator of improved farm practice and his neighbours are coming to see how

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he gets two good crops a year from his land where they 'only get one poor crop. The respectable people of surrounding villages are beginning to call him to come in and see them because he has done something noteworthy in the community and has shown power to do things which they do not find possible. Finally he has been chosen to be one of the elders of his village, acting as a peacemaker to help settle disputes with justice and good will.'

Other Demonstrators

U Pe Thaung, who lives near Shwemyo, is another demonstrator who accepts advice from the Pyinmana School. He has been planting pigeon peas, maize and different kinds of beans according to careful instructions. He has built a model poultry house with money borrowed from the poultry society. Berkshire pigs have been introduced to the village, and now the nurse from the Agricultural School visits the village one day per week, for which service the members of the Co-operative Egg Marketing Society contribute small amounts from their egg sales.

Ko Kyi E of Kabani village is another local demonstrator, *sann* hemp for green manure being his specialty. Ko Kyaw Bala, a graduate of the school, is a cultivator at Hlezeik village, near Kyonpyaw, Bassein District. At first the people did not think he

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had anything to teach them, but in time they changed their minds and showed a teachable spirit. He introduced other crops on the higher and more sandy soil where paddy does not do well. These alternative crops include soya beans, pigeon peas, New Era cowpeas, groundnuts, Goa beans and sweet potatoes. Some of his neighbours are beginning to introduce these crops on their higher lands. Ko Kyaw Bala was also instrumental in arranging a visit from the Hygiene Publicity Officer to nine villages in the vicinity, and in securing the large attendance which greeted the lecturer and movies everywhere.

This recital of the triumphs of Mr. Case and his colleagues does not convey an adequate idea of the handicaps encountered. They visited a village in October, 1935, with a view to organizing demonstrations. At first the only idea of improvement which seemed to appeal to the people was the borrowing of money from the gullible visitors. When at last the real meaning of rural uplift began to dawn on them, and they realized the necessity of self-help, a poultry society was organized, and a man with a good local reputation was persuaded to demonstrate multiple cropping on

a single piece of land under the direction of the Agricultural School.

Saw Timothy—What Scouts and Girl Guides can do

Probably the best known graduate of the school is Saw Timothy, who has been working in Pe Le Chi village near Thandaung, with his wife Laura, a former nurse in the school dispensary. The Boy Scouts and Girl Guides, Christian and non-Christian, furnish the nucleus of the work. Every Saturday morning the streets of the village are cleaned. The young reconstructors also decorate the houses, work in the gardens, sew, and collect money for medicines to be used in the dispensary. The village roads have been repaired, and, with the aid of interested adults, a two-mile stretch of road to Thandaung has been greatly improved. A trench was dug to the nearby spring, so that sanitary drinking water became easily available. Compost pits at the edge of the village are filled with refuse. Writing of the work of Saw Timothy and Naw Laura, Rev. G. E. Blackwell says :

A very gratifying degree of success has attended their efforts. It is a marvel that so many of the

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villagers are ready to try new suggestions after a short time of work in their village. A few are beginning to keep hens according to improved methods. Several are trying to improve their fruit trees. The sick are beginning to trust modern nursing and the child mortality at birth has fallen greatly.

The boys are all Cubs, Scouts and Rovers and a good band of Girl Guides has been started. These have kept their village much cleaner than ever before and built roads and water conduits.

Many institutes were held during the year, in which practical lessons in animal husbandry, meat curing, grafting and gardening were taught.

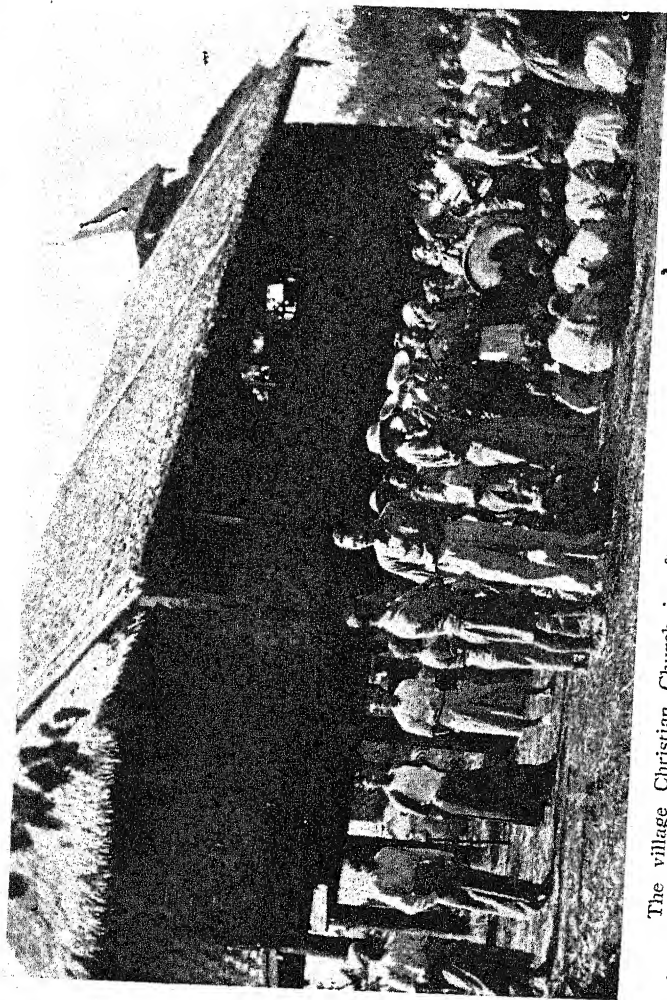
Joseph Maung Nge—Supervisor of Agricultural Demonstrations

In 1935 Joseph Maung Nge, another graduate, was added to the staff to supervise, visit and encourage agricultural demonstrations. He pays frequent visits to villages along 100 miles of Burma Railway track, with Pyinmana as base. Some readers may have felt that the bazaar lecturing, plays and other propaganda features provided nothing lasting, but only temporary interest or enthusiasm. When they are linked, however, to frequent and systematic visits by a trained demonstrator, they assume real significance. Joseph Maung Nge advises in demonstrations of all of the improved types of agriculture and health which have been

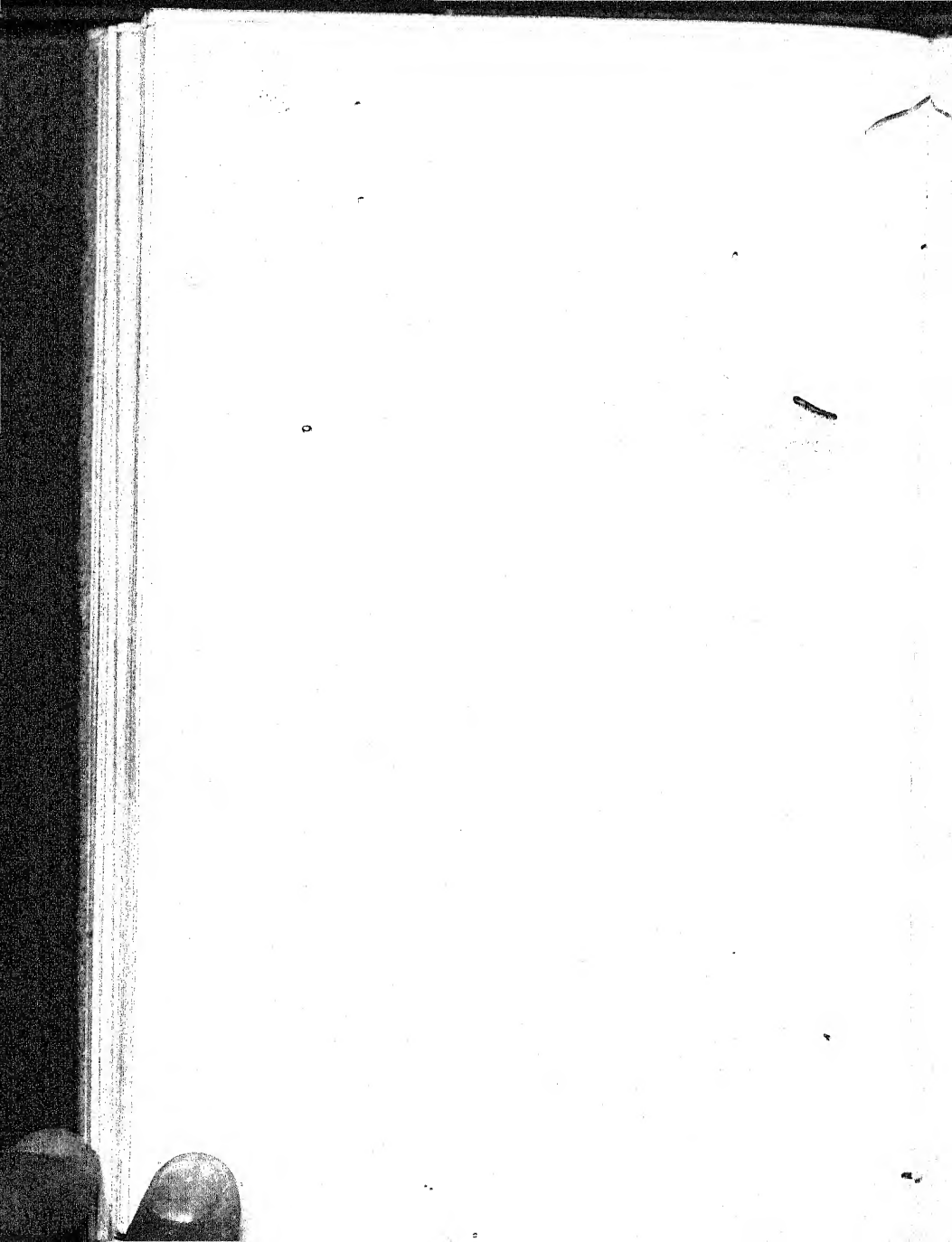
mentioned above. He distributes vegetable seeds and fruit trees where they are needed, and then returns to make sure that they are used for the purpose intended.

Co-operative Egg Marketing

The Pyinmana Co-operative Egg Society has been in existence for several years, and now advertizes its product in the Rangoon newspapers. Five graduates of the school are hired by the society to visit and collect eggs in the thirty villages in which there are members or subsidiary poultry societies. Four thousand eggs per week are gathered, carefully inspected at Pyinmana, and shipped to various markets, where their large size and superior freshness fetch higher prices than those ordinarily paid for eggs. The villagers are frequently able to appreciate the benefits of a poultry society, with improved hens, long before they can accept many other items of improvement. The reason is to be found in the Rs. 10,000 per year which finds its way, through the Egg Society, into the pockets of villagers. The five egg collectors use their official contacts as a means of helping their villages in a variety of ways. When a villager



The village Christian Church is often the centre of village uplift. Local pastors and leaders need the encouragement of visiting groups, experts and supervisors. Joseph Maung Nge, supervisor of demonstrations, Pynmana Agricultural School, is here seen with a group of students visiting the village where Saw Timothy, graduate of a theological seminary and of the Pynmana Agricultural School, is District Scout leader and pastor.



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receives highly-welcome cash from the hands of a young innovator whom he formerly suspected or did not highly respect, it is inevitable that the villager's attitude should undergo a rapid change. Gardening, diversified farming and public health measures are all making headway in most of these thirty villages.

The essential link in the chain between the village egg producer and the consumer is the work done in the testing room at the school, where Mr. Case or one of his missionary colleagues personally supervises the testing of the eggs. Their character and reputation stand between the consumer and any possible unscrupulous society member. Whether a society of egg producers in Burma, without outside assistance, could uphold the same ethical standards and maintain the same reputation with consumers remains to be proved.

Credit Co-operation

The Agricultural School has been active of recent years in the field of credit co-operation. In the middle of 1935 Mr. Case could report :

The Pyinmana Village Industrial Co-operative Bank and the two Village Co-operative Societies of Shwemyo and Lewe established last year in Burman villages have had a good year and practically all

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loans have been repaid with interest due. The training in business methods and working together honestly and strictly regarding financial matters for the good of all has had great value in character development. The fact that the money obtained for the eggs passes through the hands of those who operate the central bank makes repayment more certain. If those who manage the central bank did not control the marketing of the eggs undoubtedly the societies would not run so smoothly. Few villagers have yet learned to pay their just debts without pressure, even when there is a regular dependable income. That is where the need of moral and spiritual training comes in, which Christian Missions are in a position to give.

Workers' Institute

In addition to the ordinary four-year course, the school conducts a Workers' Institute every October. The Fifteenth Annual Workers' Institute was held in October, 1935. Registered attendance was 140, including 23 women. Five hundred or more packed the hall to enjoy concerts and health cinema shows. Some delegates came from Loikaw, Kutkai and Myitkyina. Scouts and their leaders came on one day to hear Mr. Dickason, Rangoon Scout Commissioner. On another day U Ba Tin, Charge Officer of the Co-operative Department, spoke, and representatives were invited from all nearby co-

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operative societies. On another day U Tun Yee, Deputy Director of Agriculture, spoke, and the *akyozaungs* of his department, to the number of 25, were present. These *akyozaungs* are volunteers who help in the distribution of improved strains of seed. Mrs. J. M. Smith and Mrs. W. H. Cummings had charge of a series of talks and demonstrations on 'health and home' with exhibits on health, food and needlework done by wives of workmen on the farm. Messrs. Case, Smith and Cummings also gave lectures on gardening, diversified farming, livestock rearing and other subjects of general interest. Many teachers and others return to do a much better job of rural reconstruction after the inspiration and information received in this short course.

Student Self-Support

Because of the system of payment for work done on the farm, and also because of the profit which some make from their garden projects, it is possible for the average student to support himself in the school, after payment of his fare to Pyinmana, the tuition fee of Rs. 2 per month, and Rs. 5 per annum for books. Thus the school can make a direct

appeal to the sons of poor tenants, and a friend of rural reconstruction can promise to pay all out-of-pocket expenses for several indigent village lads, even though he himself has not a large income. Those who consider sending a young man to the Pyinmana School, however, should be warned that some students enroll every year who are unwilling to perform the large amount of manual labour required, and then drop out. Anyone sending a student to this school should make sure that the applicant is willing to work with his own hands on farm and field projects.

The work of Mr. Case and his loyal colleagues was recognized by Government, when Mr. Case received the K.I.H. medal in 1935.

*Youths' Improvement Society and Rural
Reconstruction Group*

Another well-known rural reconstruction effort is that made by the Youths' Improvement Society, Rangoon, and now continued by its offshoot, the Rural Reconstruction League. U Nyun, M.A., Deputy Inspector of Schools, addressed the Society in July, 1934, and presented the challenge of rural uplift in Burma. The following quotation is

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from the report of U Thein, organizer of the rural reconstruction work :

A Rural Reconstruction Group was formed with U Tin Maung, then President of the Y. I. S., as Leader and U Thein as Organizer. The group started with eighteen members and was given the kind patronage of Mr. B. W. Swithinbank, M.A., I.C.S., Commissioner, Pegu Division. Theingyaung, a village in Insein township . . . was selected as the scene of operations. It is a large village of about 400 houses with a population of some 2,500 . . . Most of the villagers are cultivators. The Group left for the village on the morning of 29th December, 1934 and struck camp on New Year's Day, 1935.

The work of the Group was necessarily of an experimental nature and was limited by considerations of time and money. It was felt that before the Group could start suggesting improvements uplifting anybody or anything, the actual conditions prevailing in the village must be ascertained . . . the Group went there as much to learn as to teach . . . They therefore divided their work into two parts: firstly, that of investigating the conditions in the village and secondly, that of helping the villagers. Thus each morning in camp was spent in investigation, and each afternoon and evening devoted to helping villagers by lectures, etc.

To cover the whole range of village life and conditions, the Group was divided into six sections, namely Educational, Economic, Social and Moral, Agricultural, Public Health and Literature Distribution. The members of the first five sections were each given a note-book and had to spend the first part of each day in going about the village on house to house investigation, or in plodding across paddy fields to the peasants working there . . . Thus they

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came into close and friendly contact with the villagers, gaining a peculiar insight into the village life and conditions . . .

The sixth section of the Group went about the village distributing newspapers, magazines, novels and instructive pamphlets, and asked the villagers to read them.

The League secured a most distinguished group of lecturers, both Government officers and others, and nightly lectures, demonstrations and displays were given. The lectures included such subjects as 'Rural Self-Government', 'Agricultural Improvement', 'Village Health and Sanitation', 'Personal Hygiene', 'Rural Economics', 'Administration of Burma', 'Savings and Thrift' and 'Joint Sale and Joint Purchase'. A health cinema show attracted a crowd estimated at one thousand. Chinlone and other displays were given. Special meetings were held for children, mothers and other groups, with appropriate programmes. A temporary reading-room was established. The organizer wishes to stress the experimental nature of the camp at Theingyaung, which was beneficial largely because of the educational and inspirational effect upon the membership of the Society. However, about 40 bored-hole latrines were installed in

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Theingyaung within a few months following the camp.

In October, 1935, the Y. I. S. held a special Rural Uplift Training Class, where lectures were given by another well-known group of officials and others. After this class, some of the members of the Y. I. S. formed a Rural Reconstruction League, which would devote its energies more largely to rural work. The opening of demonstration centres was from the first a leading object of the League. The League held camps at Sathataw, Kolonkwin and Htaukkyan villages, on the Rangoon-Prome Road, on 27, 28 and 29 December, 1935, respectively. At the present writing, however, the League is undecided as to which of the three villages should be the site of the first permanent demonstration centre. Some bored-hole latrines have been put down and a reading-room has been established in the hpongyi kyaung at Kolonkwin village.

One member of the Y. I. S. is studying rural reconstruction in England with the help of a State scholarship. Two members of the Rural Reconstruction League attended the institute at Martandam during the hot season of 1936.

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In view of the sympathetic following which these ambitious young men command among educated Burman Buddhists, it is to be hoped that a permanent demonstration centre is speedily established, and that it may develop a technique which can be copied widely. There must be hundreds, if not thousands, of young men throughout Burma, who will undertake similar work when convinced that the Rural Reconstruction League has found a means of bringing real uplift to rural centres. It is not too much to hope that when a satisfactory method is established, the League may interest wealthy Burman landlords and others in providing the funds with which to undertake a much more ambitious work, such as that of the Y.M.C.A. at Martandam, Travancore, described by Dr. Hatch in *Up from Poverty*.

Thongwa—Education with a Rural Bias

The American Methodist Mission has made an interesting experiment in rural education at its middle school at Thongwa, Hanthawaddy District. The pupils study the ordinary middle school curriculum in the morning, and take up such vocational subjects as gardening,

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field crops, domestic economy, carpentry, clay-modelling and canework in the afternoon. The school crops supply a considerable portion of the food required by the boarding departments, and some produce is sold. The boarders pay Rs. 2 and a basket of rice per month as fees, in addition to the two and one-half hours per day of outside work. Boarders and day pupils join in transplanting paddy, whether paying fees or not. Some of the graduates go on to high school, and are said to be doing well in their studies. Surely those who do not go on to high school are much better equipped for rural life because of their work in the school. The Vernacular Education Committee visited this school in July, 1935, and an account of the visit was published in a daily newspaper. The curriculum is similar to that at Sawston, Cambridgeshire, which is there the pride of the county educational authorities.

The Lower Burma Fresh Egg Association was organized by Rev. C. E. Olmstead, and collects eggs from five villages for sale chiefly in Rangoon. Five dispensaries have been organized by the Methodist Mission in villages near Thongwa, and are managed by the head-

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man, the pastor or the teacher, the medicines being given free where sale is impossible.

A village welfare society was started in Bog-yok village, near Syriam, by U Ba Thwin, and soon enrolled 200 members. Six street lamps were secured and placed along dark places in the village road. A road was built, twelve feet wide and over a mile in length. Unemployed persons working on the road received a small daily wage, but many volunteer labourers also assisted. Recreation is a leading and successful activity. A scout troop has been organized. Several bored-hole latrines have been installed. U Ba Thwin points out that the society requires continued assistance and inspiration from the organizer to keep the programme moving.

Chaungwa—Training Village Teachers

Until Miss England went on leave recently, the S.P.G. Mission had a Village Teachers' Training School at Chaungwa, also in the Delta. Vegetables, pigs and poultry are made the subjects of regular study. Attention is given to dietetics, and the vitamin content and other food values of different vegetables are ascertained. Each pupil has a garden plot,

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10 by 20 feet in size, and the plots are handled in groups, under leaders. The third and fourth standards have mat weaving and bamboo work, besides literary work and the gardening and livestock rearing mentioned above. Miss England is greatly missed at present, but the work is continuing.

The Delta Medical Mission

A truly remarkable work, carried on with unbelievably small funds, is that of the Delta Medical Mission, under the inspiring leadership of Miss A. M. Cam, a trained nurse. Pedaw, in the Wakema Subdivision, is the headquarters of her work, and here there is a four-bed maternity home, which handled 52 cases in 1935. There are dispensaries, in charge of vernacular-trained nurses, in four other centres. From sixty to one hundred new patients per month are treated by each of these dispensaries. Self-support and self-help are important features. The medicine is almost always sold, not given away. Maternity cases pay Rs. 3 each. The small bamboo dispensaries are erected and kept in repair by the villages concerned. The very small salaries which Miss Cam finds for her nurses

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are supplemented by free food, furnished by the villages. Many residents of Rangoon, on hearing Miss Cam tell of this work, have received a new idea of Christian service.

Kappali—Its 'Jungle Folk'

The present Anglican Bishop was for some years engaged in a pioneering piece of work in Kappali village, up the Salween. Handicrafts, gardening and medical work are some aspects of this interesting venture. A very good type of fast-coloured cloth is woven in a variety of patterns. It finds a ready sale in Rangoon, and thus supplements the meagre cash income of the villager. The local Karens are now in charge of the programme, assisted by Mr. R. D. Brooke.

Sagaing Hall—an Effort by Collegians

Sagaing Hall, University College, undertook a village camp in August, 1935, along lines somewhat similar to those of the first Y. I. S. camp. At the present writing it seems likely that a group of University College students will undertake weekly visits to a village, and will exchange personnel and ideas

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with the Judson College group which is doing similar work.

Kengtung—Leprosy and Public Health

Dr. R. S. Buker, M.D., M.P.H., and his brother Rev. R. B. Buker, of Kengtung, have been developing a public health programme for some years. Many rural areas in Kengtung State are reached effectively. Dr. Buker has taken a University degree in Public Health, besides specializing in that field of work since being stationed in Kengtung. He writes :

The romance of educating a rural people into the mysteries and advantages of cleanliness, good medicine in times of sickness and the general principles of prevention of disease instead of the fear of the unknown can hardly be matched by any other proposition. . . . No greater scope for the imagination can be asked than to see the thousands of villages scattered about the hills without any help in time of suffering, no doctor to be called if things become serious, nothing but a miserable hope that things might come out all right later on. A carefully-constructed programme has been made to meet these needs . . . it calls for the elimination of filth and dirt in the villages, the digging of proper pit toilets, the drainage of surface water, the grand fight against the anopheles mosquito, the value of quinine. The minor problems are not left out and vaccination against smallpox, the advice for early treatment of trachoma and infant

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welfare are woven into the complex problem. This is what education will do. But the biggest problem has not been met, how can we educate? Three important languages of the hills with their various dialects, and the main language of the plains with its countless variations, none of which is English or Burmese, present the first block.

This educational work is done largely with the teachers and preachers, who are given an elementary course in medicine and first aid, and sent out to teach hygiene, and dispense medicines. Such a man falls far short of western standards of medicine, but :

no matter how little he studies he is an improvement on that which has gone before. Every teacher or preacher in his village . . . becomes a doctor whether he knows or does not know, because he is the most intelligent person in that area.

The Bukers maintain three outstation dispensaries. The Roman Catholic Mission in Kengtung maintains no less than nine outstation dispensaries. Leper colonies have been developed by both missions, particularly by the Bukers, who had 430 lepers under treatment in their six colonies, in March 1936. The colonies are established in convenient centres not too far from the villages from which the lepers come. A large number of these lepers are taken in time so that their disease is

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definitely arrested, and so that they may return to their own villages. Most of them are given the opportunity to learn to read and write while in the colonies, and of course hygiene and public health are taught both by example and by precept.

Pang Wai Agricultural and Industrial School, Kengtung State

Probably the most effective and important piece of rural reconstruction thus far accomplished in the Shan States is that of the Pang Wai Agricultural and Industrial School, near Loimwe. Rev. J. H. Telford, Ph. D., is the Superintendent of this school, which has been in operation for ten years. The school farm covers 300 acres, and employs nothing but student labour. The students are chiefly from the Lahu race, which perhaps makes it easier to persuade them to condescend to actual toil. Dr. Telford reports that the 1935 crop of potatoes was unusually good.

Tung oil seems to be the chief concern of this institution at present, as the trees grow well in poor soils with a minimum of care. Attempts are being made to persuade the villagers to plant tung oil trees on a large scale,

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as there is a big demand from paint manufacturers for this oil.

There is a farm dairy, and a little success is to be noted in teaching the Lahus to drink milk. Improved poultry has also been introduced. Weaving is carried on with the improved type of government loom. Attempts have been made to breed silkworms, but although a little silk has been produced and woven on the school looms, climatic conditions have kept this industry from succeeding. Road-building and masonry are described as follows by Dr. Telford :

We have built this year a stone dining-hall, for the boys of the school. Much of this building work has been done by the students of Pang Wai School. Roads are kept in repair by the pupils of this school. This is good training for the Lahu, as the Lahus have the poorest kind of 'rabbit paths' leading to their villages. Here we have a system of motor roads running through our Mission compound, where a few years ago leopards and tigers roamed.

Kachin Uplift

Long before the phrase 'rural reconstruction' became widely used, Rev. George J. Geis, missionary to the Kachins, and his predecessors Hanson and Roberts, had done much for the economic and physical well-being

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of the people among whom they worked. Mr. Geis writes :

As Kachins came to the plains they naturally continued the destructive method of rice cultivation of the hills, which was to cut down all trees, and then dry-burn them over. And the next year do the same thing in another place. This they did at Mankin, near Myitkyina. For a number of years I tried to persuade them to cultivate the wet paddy fields, and plough them with buffaloes. They were given assistance to buy these buffaloes. When one family was by this method able to raise more rice than they needed the others slowly followed, so that they gradually became economically far better off than their friends in the mountains, who rarely had enough rice from one harvest to another. They were induced to make gardens. At first they were helped with seed and even seedlings of fruit trees of better quality, from the Mission compound at Myitkyina.

Much has been done to change the prevailing type of Kachin house, which lacked light, ventilation and separate rooms for boys and girls. The problem of drinking water became more acute for the Kachins as they moved to the plains, where the Irrawaddy provided water much less pure than had the mountain streams. For a number of years dysentery and other bowel diseases visited the Kachins every June. When cholera finally broke out, destroying two families in a night, they called

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on the missionary, accepted his advice, and installed a good well with cement cylinders, whose water would replace the polluted waters of the river. The villagers paid for their own well, and so did other villages which followed their example. To quote again from Mr. Geis :

The following is only one of the many occasions when I was able to drive home the value of pure drinking water. Early in June the headman of a village came to me with a startling story that some twenty people in the village had died of dysentery, and many more were ill. Could I help him with medicine? I knew that some of the Shan villagers near the stream above them had dragged the carcasses of their dead buffaloes, who had died of hoof and mouth disease, to the stream from which these people were drawing their water . . . I got some medicine for them from the hospital, and warned them to drink only boiled water. The disease at once subsided. The next dry season they were willing to take the advice which I had long before given them, namely to dig a village well.

Now Mr. Geis has 'retired' after nearly half a century of service, but is carrying on the Kachin Bible School at Kutkai. The students helped put up their school buildings, recently, with local stone. They grow their own vegetables in the school gardens. Two students go each week to each of a number of selected

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villages (the same students go to the same villages each week) for training in social service. Their programme includes general sanitation, dispensing simple medical remedies, planting gardens, and general social and religious work. Each student hands in a report of his work when he returns. Many of these students will be the best educated and the most respected members of their villages, when they settle in pastorates. It is reasonable, therefore, to expect a continued improvement in Kachin village life, under their direction.

Kachin Work at Bhamo

Rev. J. M. England is now carrying on Kachin work at Bhamo along similar lines. He solicited and secured the aid of the Hygiene Publicity Officer in connexion with the annual meeting of the Kachin Baptist Convention at Bhamo in March, 1936. Over four thousand Kachins saw the movies and heard Dr. Tha Saing's lecture on various aspects of public health. It was the first movie hundreds of them had ever seen, and perhaps for these the health lesson was lost in the novelty of the occasion! With the help of the Civil Surgeon and some of the town elders, arrangements were

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made, whereby Dr. Tha Saing had two nights in the Bhamo cinema hall. The Deputy Inspector of Schools arranged for several talks in the schools. A latrine-boring outfit was demonstrated at the Kachin Convention by Dr. Tha Saing, and left behind for further use. At the present writing Mr. England is arranging to use the outfit extensively, both in Bhamo and in surrounding villages, with school-boy labour as the motive power. One village in particular has been visited by serious cases of dysentery annually, and here a special effort will be made to install bored-hole latrines. The Deputy Commissioner of Bhamo District has kindly consented to help with funds for the digging of a sanitary well in this village, where twenty people died of dysentery and allied diseases in 1935. Preventive vaccines will also be given in this and other villages. Each Kachin school in Mr. England's charge is supplied with a set of the Public Health Department posters, and great numbers of public health leaflets are being distributed to those who read Burmese. Two or three more ambitious projects are at present in the planning stage only, but should be in operation within the next few years.

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Gardening at Thonze

Rev. J. .T. Latta of Thonze has stressed gardening, particularly among refugees from the Tharrawaddy Rebellion of 1930-1, and in many villages since then. His work was described in the April 18, 1935, issue of the *Rangoon Gazette* under the heading: 'Educating Rural Burma, the Story of a Village Experiment.'

Training Village Teachers in Upper Burma

Another rural educational experiment is that of the Vernacular Teachers' Training School of the English Methodist Mission at Kyaukse, under the direction of Miss Hollingshed, which, according to Mr. Case :

is doing a splendid work in adapting modern educational ideals to primary vernacular school conditions in Burma . . . an industrial department for girls giving training in forms of sewing and embroidery work by which older girls could earn some income in the village with the needle and sewing machine, was an interesting new venture.

Thaton and Tavoy

The Report on the Operations of the Department of Agriculture, Burma, contains reference to certain other organizations which are

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working toward rural improvement, and are receiving technical assistance from the department. One such is the Thaton District Farmers' Union, composed chiefly of well-to-do cultivators. Another is the Tavoy Horticultural Society, which :

. . . has now 10 acres almost fully cropped with improved varieties of fruit trees and upland crops supplied from the Mudon Agricultural Station, such as mango, sapota, litchi, citrus . . . breadfruit, kew pines, pesinngon, etc. The area will be self-supporting in the near future, but at the present time individual members of the society have contributed sufficient funds to enable the garden to reach the bearing stage. The actual aims of the society are:

- (a) to demonstrate the benefits to be obtained by growing improved varieties of crops, and correct cultural methods, and
- (b) to supply grafts, gooties and seeds to the cultivators of this district.

Projects at Namkham and elsewhere

The Harper Memorial Hospital of Namkham, of which Dr. Gordon Seagrave, M.D., K.I.H., is Superintendent, has trained many young women, chiefly of the Shan and Kachin races, for village medical work. Several graduate nurses are now serving village communities. Sawbwās, myosas and other philanthropic individuals provide the necessary Rs. 35 per month salary.

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Miss Selma Mahville, head nurse of Ellen Mitchell Memorial Hospital, Moulmein, has for some years been making frequent trips to villages with her nurses. Some of these nurses take up work in needy village areas, instead of further overcrowding their profession in the towns.

The Rangoon Y.M.C.A. made a start toward rural reconstruction work in March, 1936, by sending two young Burmans to attend an Institute at Martandam, scene of the achievements of Dr. Hatch and his colleagues.

In addition to the specific pieces of rural reconstruction mentioned in this chapter, there are many mission stations in or near rural areas which are strong uplifting agencies, giving training in personal character and social habits and relationships which are the backbone of all uplift movements.

CHAPTER IV

JUDSON COLLEGE EXPERIMENTS IN RURAL RECONSTRUCTION

THE Rover Scouts of Judson College, under the leadership of Mr. F. G. Dickason, started recreational work in Htantabin village, on the borders of the University Estate, in the year 1934-5. Basketball standards were erected in the premises of U Parama's hpongyi kyaung, and the game was greatly enjoyed by the many boys in the kyaung.

This work was continued and expanded in the year 1935-6. Football matches with other teams of a similar age were arranged and refereed on the college playing fields. Seeds were given out, and some of the boys began to make a showing in gardening. An improvement society, or *totetgyipwayay athin*, was organized among the men of the village, and a library started, chiefly with books and literature supplied by the Rovers. Lectures were given by officials of the Public Health Department and by others. A number of college students organized a class of 47 boys from among the scholars at the kyaung, and gave

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regular instruction in English. Public Health Department literature was handed to practically every householder.

The village is situated just west of the junction of Prome Road with Insein Road. Few who motor by this busy intersection realize that a populous village is situated nearby, without roads, sanitation, electricity or any other amenity which would distinguish it from thousands of other villages in Burma. The villagers support themselves with flower gardens, for whose products the Rangoon bazaars furnish a steady market, and by work in the nearby Kamayut factories, especially the Violin Hosiery Works.

A Menace to Public Health

It was practically impossible to discover a single household where there was adequate provision for the disposal of nightsoil, in spite of the fact that this village is just inside the city limits of Rangoon, whose Corporation by-laws prohibit such conditions as an obvious menace to public health. Needless to say, flies abound in the unseemly piles of nightsoil. Very few of the houses are supplied with water from masonry wells, a simple

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hole in the ground being sufficient. Into this hole, in some cases at least, surface pollution may flow during the rains. With the co-operation of the Health Department of the Rangoon Corporation the householders were warned of the unsatisfactory condition of their sanitary disposal, and with the co-operation of the Rural Health Unit, Hlegu, a bored-hole latrine outfit was borrowed, and a number of sanitary latrines dug, starting with several inside the premises of the kyaung. At the present time, however, it seems unlikely that *persuasion*, unaccompanied by coercion, can cause all the villagers to install bored-hole or any other type of sanitary latrine. At some time, perhaps in the distant future, the Corporation will find money to buy land and construct roads, after which conservancy carts can reach this area. Until that time, however, it seems that the efforts of the college students can merely mitigate, rather than remove, this real menace to the health of the entire community, including all of Rangoon University.

This condition demonstrates the 'social' nature of public health. The 'flying radius' of a fly is said to be three miles. Every University hostel and all University classrooms

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except those of the Medical College are within one mile of this village, although most of the students and staff members of the various colleges probably do not know that the village exists. It seems extremely reasonable to suppose, however, that a considerable portion of the cases of bowel disease treated by the University Sanatorium are due to the insanitary condition of Htantabin! Perhaps readers of this book may look about them and find, in less than three miles from their own homes, similar conditions. If so, they would be protecting the health of themselves and their neighbours, as well as of the villagers concerned, by introducing the use of bored-hole latrines. True, the *Burma Village Manual* prohibits such insanitary conditions in all village tracts, but the enforcement of this dead letter seems out of the question for the present.

Women Students

Mrs. St. John, with the aid of some of the Judson College girls, organized a women's improvement society in Htantabin. Appropriate activities were found which interested the women of the village.

The Rover Scouts were not a little surprised

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when, at the Rangoon Health Week exhibition, the boys of U Parama's kyaung staged a very original health play, showing first the terrible health conditions of a typical village, and then the improvement wrought by the Judson College Rover Scouts. The proper romantic touch was provided when the leader of the Rovers was smitten by the charms of the daughter of the *thugyi*!

Village Improvement Societies

The other chief centres of rural reconstruction by Judson College students are Mingaladon (Danyingon), Hlawga, Shwe Pyi and Ingyingon villages, all in Insein District, and Kauhmguyaung village in Hanthawaddy District. The preliminary investigations at Mingaladon were made at the end of June, 1935, under the direction of the present writer, and weekly meetings were started in July. The *totetgyipweyay athin* of Mingaladon antedates that at Htantabin, with the membership of the men's society varying from ten to twenty. Self-help was stressed from the start, all office-bearers being villagers. The weekly lectures covered a great variety of subjects, including, for instance, a Public Health movie,

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gardening, co-operation, modern political development, rural life in Denmark, a chemical demonstration, a physical demonstration including the 'electric eye', a demonstration of a microscope borrowed from the Biology laboratory and the display of thoroughbred chickens, with a discussion of poultry farming.

A library was started, and in addition to the full supply of Agricultural Department and Public Health Department literature a number of books and magazines in the vernacular were supplied. Back copies of magazines and newspapers were secured from the College Library in great numbers. A loan register was provided and the librarian given constant help and supervision in keeping an accurate record of withdrawals. On some occasions the librarian, with the help of another member, would carry the 'library' from door to door, collecting previously-borrowed books and giving out new ones. The importance of the library cannot be over-emphasized, for it is an invaluable ally in producing the open mind which is required in all sorts of improvement schemes.

The experience in gardening was less gratifying. Some of the villagers already grew ✓ plantains and papayas, while mango trees

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abounded. Apart from this there was little gardening except by two or three professional gardeners. Many of the villagers work in Rangoon or Insein offices and shops, and perhaps consider themselves above gardening. In any case, liberal quantities of seed were distributed, and a number of small gardens started. Most of them failed, due to lack of regular care, but in two or three cases a definite improvement could be noticed. One of the outstanding handicaps was the lack of sufficient initiative to fence off the gardens. The first 'society garden' had an utterly inadequate fence, and was destroyed by the goats of the Secretary of the society! During the rains of 1936 we find that the total space devoted to gardens in Mingaladon is nearly twice what it was in 1935. Perhaps, some of the villagers required a year to accept our advice!

Eight bored-hole latrines were constructed with the help of a borer from Hlegu. Recreation and activities for children were not stressed during 1935-6, but during the present year a Scout troop is the leading activity of the men students in Mingaladon.

Under the leadership of Mrs. J. F. Cady; the Judson College women students have been

visiting Mingaladon regularly and have organized a women's society. They have specialized in sewing, first aid and similar subjects of interest to home-makers. They take a qualified woman physician with them once a month to supplement their efforts.

Regular visits have been made to Shwe Pyi village, near Wanetchaung, since the end of the rains of 1935. This is a strictly agricultural village, most of the inhabitants being tenants and labourers. A few support themselves by the manufacture of paddy grinders and by gardening. There is a Government-aided vernacular primary school. On the whole, the people are much poorer in Shwe Pyi than in either of the other villages in which improvement societies were organized. Gardening, however, is carried on more extensively than in most Burmese villages. Part of the reason for this may have been a trip by the village teacher to the Workers' Institute at Pyinmana, from which he returned with great enthusiasm for gardening and livestock rearing.

Medicines and First Aid Most Popular

• Shwe Pyi is an hour's walk from the railway, and nearly as far from the motor road, so

modern medical care is almost unknown. Hence medicine has occupied a larger place in our programme than at Htantabin and Mingaladon. On several of the visits a nurse was a member of the party, with a rather well-stocked medicine kit. At first there would be a bit of hesitation to bring forward the sick, but after the ice was broken patients would flock to her from all sides, and she would be kept busy treating one patient after another for two hours. The receptive mood of the villager during treatment offers a splendid opportunity to drive home a few simple truths about cleanliness and other good living habits.

The nurse was easily the most popular member of the party, so, with the aid of a grant from the Burma Red Cross, a larger stock of medicines has been purchased for use in the year 1936-7. Of course a nurse cannot be expected to handle the most serious cases, if there is any possibility of securing the services of a doctor. On one of our visits we found an old man, probably brought to Shwe Pyi from another village because the *thugyi* didn't wish to have another death to report. Starvation and other causes seemed to make the case hopeless before we appeared. We reasoned

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that if we gave any treatment we would, to a certain extent, be saddled with the ultimate results. Therefore we gave the teacher sufficient money to move the patient to the Insein Civil Hospital, where he died a week later, there thus being no possibility of attributing his demise to our amateur treatment. Since July 1936 the Burma Private Medical Practitioners Association has furnished doctors for fortnightly or monthly trips to five different villages. More difficult cases can be handled, and the students can learn much practical medicine.

Help from Government Departments

Lectures and a library were provided, as at other centres. A visit was arranged for the Public Health Inspector, who gave a lantern lecture on some aspects of public health, vaccinated 70 villagers, and chlorinated some of the wells so that the drinking water might be pure.

A bored-hole latrine outfit was borrowed from Hlegu, and is being used in the village at the present time. Malaria seems to have caused considerable suffering in Shwe Pyi, with no use of cinchona or quinine whatsoever.

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The authorities have now issued a license to the teacher to sell cinchona febrifuge tablets at the authorized Government price, and his sales efforts are and will be supported by the persuasion of the college students.

Perhaps because of the prevailing poor health of the village, Shwe Pyi villagers are more responsive to the health side of the improvement programme than to any other. They sent a petition, from their Village Improvement Society, to the District Council and to the Director of Public Health, requesting favourable action on the present proposal (since accepted) that the activities of the Hlegu Health Unit be extended to the other three townships of Insein District.

Masonry Wells

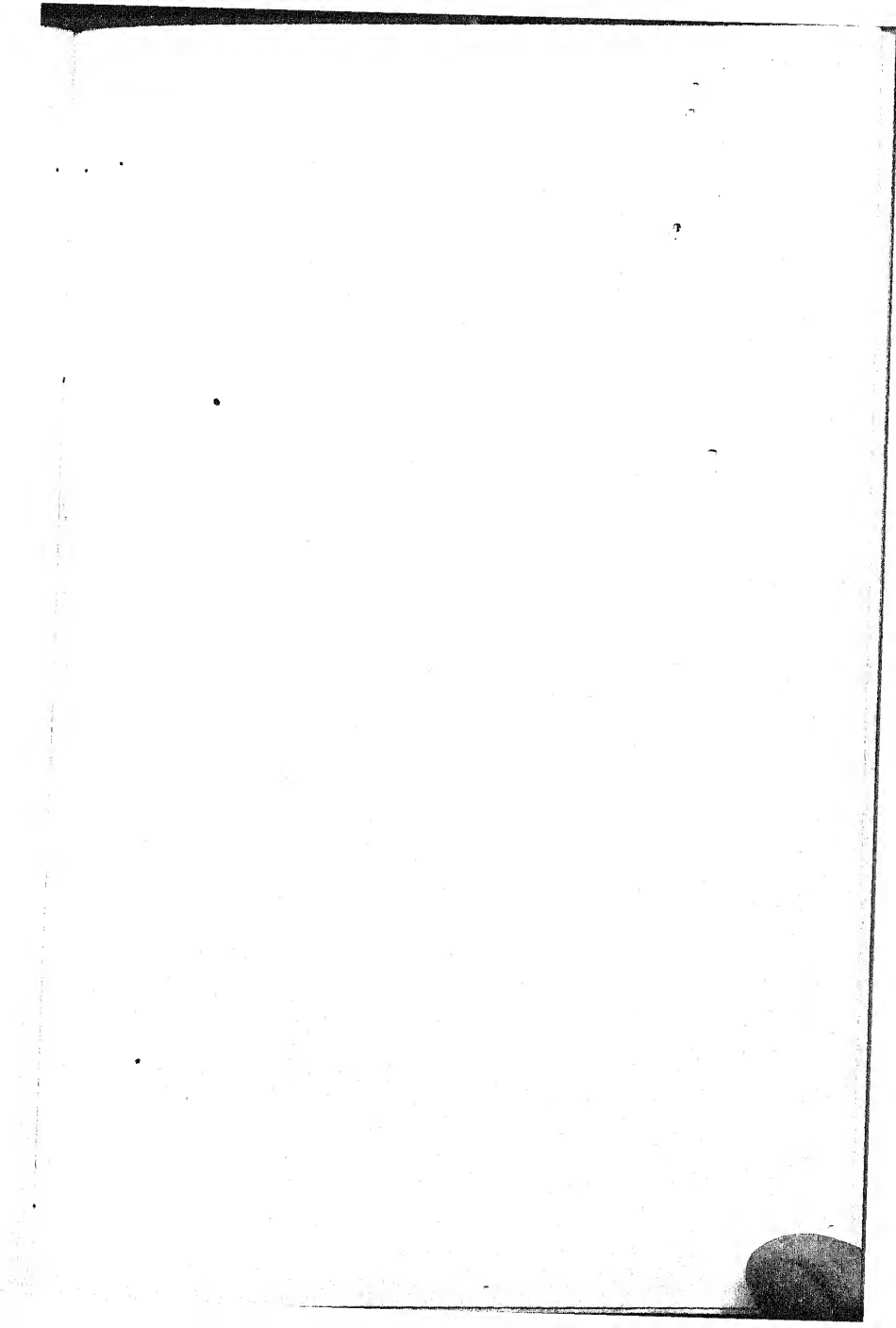
Both in Shwe Pyi and in Mingaladon practically all of the villagers drank unboiled water drawn out of wells which are mere holes in the ground, with no masonry or other embankment to keep out surface pollution. Through the kind co-operation of the Deputy Commissioner of Insein District, funds were supplied for the construction of masonry wells in both of these villages. While two students

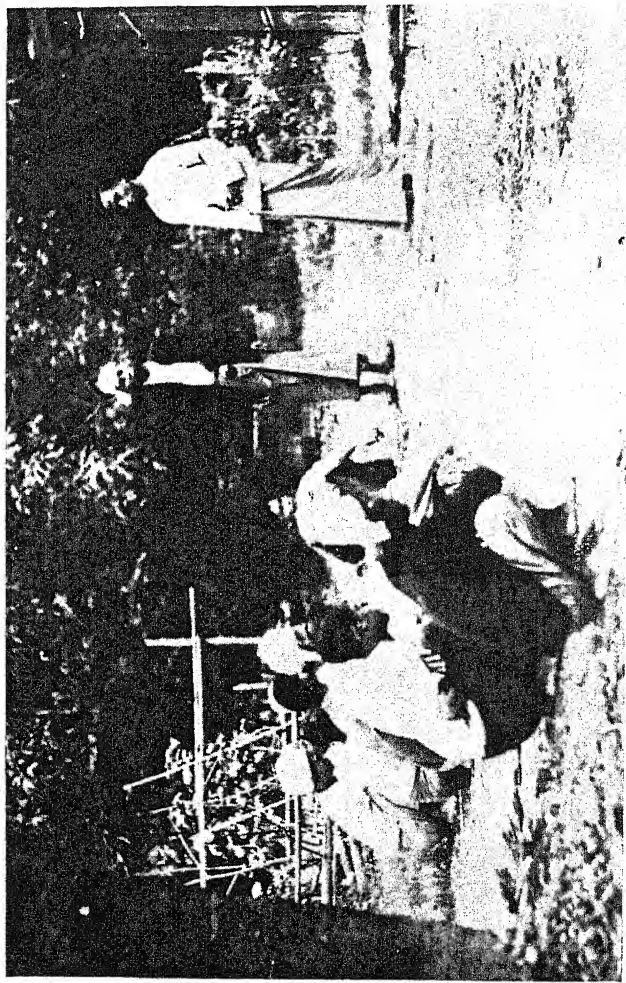
were making an overnight trip to Shwe Pyi, to measure the well in preparation for the estimates, they met a villager from nearby Ingyin-gon, who persuaded them to visit his village. The *thugyi* and others were eager to have a masonry well also, and thus the well project came, to include the three villages. The materials and skilled labour were supplied from the public funds, but the labour of digging the well and assisting the two masons was supplied free of charge by the villagers themselves. This self-help by the villagers was considered very essential, lest they become 'pauperized' and come to regard improvement as something which must come exclusively from the outside.

*Self-Help Not Preferred by the Villagers
themselves*

This insistence upon self-help by the villagers made our task infinitely more difficult, especially at Mingaladon. Some of the members of the society consider themselves socially superior to manual labour for the welfare of the village as well as superior to gardening. Furthermore, they pointed out that the Insein District Council had, a few years before, supplied them with a well 'without asking us to

move a single brick'. Because of this supposedly generous action of years ago, it seemed to the villagers that they should have all other improvements handed to them by outside agencies, without effort on their own part. We went to inspect the well. We found that it was a simple hole in the ground, without masonry or other protection, the same as others in the village, except that it was situated under trees and bamboos so that bird droppings made the water even less desirable than the water in other wells. The work of the District Council consisted in building a timber platform over the well, so that it would be easier to draw water. It appears that the well was there, in the form of a hole in the ground, long before the District Council made its gift. From the public health standpoint, therefore, the well-meant gift did neither good nor harm, but from the standpoint of encouraging future efforts toward self-help it proved a definite handicap. Maung Ba Shin, chief rural reconstructor among the Rover Scouts, spent all of April and half of May, 1936, in Mingaladon, Shwe Pyi and Ingyingon, giving general aid and encouragement to the construction of the wells. Anyone who has not had simi-





By courtesy of 'New Light of Burma'

Maung Ba Shin giving an informal talk to some villagers at Shwe Pyi. A few informal gatherings like this during a visit are much more in line with village customs than formal meetings at fixed times.

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lar experience would be astounded at the number of small difficulties which cropped up, and any one of which might have caused operations to be suspended indefinitely but for the continued encouragement of Maung Ba Shin. I understand that a book was published in Bengal, some time ago, entitled *Automatic Rural Reconstruction*. The digging of these wells was certainly not 'automatic', but took a vast amount of personal encouragement.

College Students Live in Villages

The effectiveness of the efforts at rural reconstruction has been enhanced by the action of several college students who lived in these villages during Thadingyut, Christmas and hot season vacations. By such means the natural suspicions which any villager feels toward outsiders are likely to be allayed. He will come to see that the student is not, after all, a politician seeking his vote, but is sincerely anxious to be of help.

Feudalism versus Democracy

At Ingyingon no effort was made to organize an Improvement Society. The work was immediately entrusted to the headman,

who secured the co-operation of the villagers with little trouble. The leadership principle seemed to work quite well in the village. The democratic Improvement Society in nearby Shwe Pyi also ran smoothly until the President failed to bring forward the subscriptions which he had collected for well-digging. This did not prove an insuperable handicap, however. In Mingaladon the well was first put under the control of the Improvement Society, but internal difficulties accentuated the problems, and at last it was necessary to turn over the management to a single influential and well-to-do villager, who was as successful as was the *thugyi* of Ingyingon in eliciting the help of the villagers. From our experience thus far it is impossible to say whether the improvement society method achieves better immediate results than reliance upon the leading man of the village. Certainly the latter method is more in harmony with the feudal organization which prevailed in Burma for so long. Yet it would seem that the more democratic method is likely, in the long run, to have an educational effect which will make it superior.

In the weekly or fortnightly trips to these villages, an effort has been made always to

take along the same leading student, but to take different students as his colleagues at different times. The leader is usually the one who lives at the village during vacations, and who has acquired the confidence of the villagers. If the staff member and the leading student are well known to the villagers, it does not seem to matter that a large number of strange students accompany them from time to time. By this method it is possible to give a considerable number of college students some elementary training in certain aspects of uplift work.

Technique of Pamphlet Distribution

The one type of work in which an effort is made to train each student is the distribution of Government pamphlets on agriculture and public health. A group of two or three students goes to a house, preferably at a time when the family is eating or at leisure. A general conversation ensues, which is turned by the students to the subject of agriculture or public health, as the case may be. The pamphlets are produced, the subject-matter is given, a few sentences are read, and there is a general discussion of the contents before two or three different pamphlets are handed

over to the householder, who by this time has promised to read them. Some boys show remarkable facility in making the acquaintance of strange villagers and expatiating upon the virtues of the free literature. One Arakanese lad was extraordinarily eloquent, on his very first visit, in dwelling upon the non-existence of *metkalaung*, while preparing to give out Public Health Pamphlet No. 110, which deals with that subject. After a week the leader with one or two colleagues revisits the same group of houses, this time with a different set of pamphlets. Inquiry is made as to whether the previous pamphlets seemed satisfactory. In this way one learns whether or not the householders have actually read the pamphlets previously given, and if they have not done so a polite effort is made to extract a promise to read them during the coming week. The rural reconstructor must constantly bear in mind the necessity of repeated visits, and of giving only a few pamphlets during any one visit.

In these visits it is felt that a genuine effort must be made to explain the true relationship of the student to the Government Department whose literature he is distributing. It is

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easy for the villager, not accustomed to receiving visits from townsmen, to imagine that the distributor of Government literature must be a Government officer. This misconception must be combated from the start. In the first place, if the villager believes that the student is paid by Government he will discount the student's real interest in himself, and will almost certainly adopt the attitude of the outstretched hand, hoping to secure gifts and favours from Government without effort of his own. If he happens to have political ideas unfavourable to Government, this fact would also hinder the effectiveness of such contacts. In the second place, the student is certainly not an expert on agriculture, as is the Senior Agricultural Assistant, nor an expert on health as is the Public Health Inspector. If the student is confused by the villager with these officers, and if he later on displays an ignorance on the subject of which he is to be an expositor, the technical reputation of the Government Department is likely to suffer.

Village Boy studies Agriculture

The efforts described above, taken singly, may come to little. For instance, it must be

a most unusual villager who reads a single pamphlet and then, without further persuasion, proceeds to do as advised. However, when a number of different avenues of approach are utilized simultaneously, their cumulative effect will produce action in some cases. Probably the most permanent effect is produced by the training of one or more village residents, who will demonstrate to the village, in a lasting way, the benefits of the new mode of living. To this end efforts have been made to persuade villagers to send their sons to the A. B. M. Agricultural School, Pyinmana, or to the Farm School at Hmawbi. One young man from Shwe Pyi is now enrolled in the Pyinmana Agricultural School. Another was enrolled in the Farm School at Hmawbi, but he left after one day, because he only received Rs. 10 per month for his valuable presence, and some other students (from a greater distance) received Rs. 15! We expect to try again next year, and hope to be more fortunate in the selection of a candidate. If one or two of these lads proves to have the proper qualities, and finishes the course to return and demonstrate improved methods of agriculture and living at Shwe Pyi, our whole uplift pro-

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gramme will, we believe, receive a great impetus.

Judsonians' Vacation Work

During the hot season of 1936 a total of twenty-two Judson College students engaged in various forms of rural uplift work, all the way from Hsipaw, Meiktila and Mongnai to Tavoy, and from Moulmein to Akyab. No very ambitious programme was attempted by most of them, but in every case a start was made with an armful of free literature. Those who were Christians returning to their own villages also took along a supply of free Christian literature. Most of the students confined their efforts to the villages in which they would normally reside during the hot season in any case. Some are the sons of *thugyis* and land-owners. Others live in District Headquarters, but have relatives and acquaintances in some nearby village which they visit regularly. They were not encouraged to spread their efforts over too many villages during a given period, because of the necessity of taking much time for 'getting acquainted', without which efforts are usually of little effect. In a number of cases, students were armed with

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introductions from the Assistant Director of Public Health to the local Public Health Officer, and from the writer to the local Deputy Director of Agriculture. It was hoped that by this means villages which came to request the visit of a vaccinator, a lantern lecture on public health, or the loan of a latrine-borer would have easy means of access to the proper authority. Cultivators who could be persuaded to ask for pure seed would thus be put promptly in touch with the nearest Government seed farm.

In backward Karenni

One student, proficient in both Karen and Burmese, devoted his efforts during April and part of May to work in Karenni. Through the co-operation of the Civil Surgeon, Taunggyi, and the Assistant Political Officer, Loikaw, a Public Health Inspector and a Vaccinator were added to the party, and transportation expense provided. The Hlegu Unit provided a bored-hole latrine outfit. Thirteen villages were visited during the month of April, according to a schedule arranged by the A. P. O. In each village the headman, *boheng* or *myook* was the host and the local

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director of operations. More than 500 vaccinations were performed and many more would have been given but for the 'water festival' which occupied the attention of so many at that particular time. No doubt many of the 500 were persuaded to submit to vaccination only by the combined enthusiasm of the three young men. A sample bored-hole latrine was put down in all save one of the villages, with the aid of the villagers themselves. It is hoped that after the party completes its tour some of the villages will request the further use of the outfit, so that a number of latrines may be installed. A lantern lecture was given in each village, and a set of public health posters displayed. The usual supply of public health and agricultural pamphlets was distributed. Some of the villages contain Christian churches, and the missionary in charge is making plans to urge the use of bored-hole latrines and otherwise follow up the work of the public health team. The writer called at one village while the team was at work, and found the members enjoying their work immensely. At the conclusion of the month the college student and the bored-hole latrine outfit stayed in Loikaw, where a number of

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latrines were installed in the A. B. M. school compound with the aid of the pupils. The borer has now been purchased by the States, and will therefore remain permanently in Karenni.

Co-ordination of Government and Private Agencies

Before leaving the subject of private agencies in rural reconstruction, it might be well to consider briefly the various spheres in which private agencies and Government Departments might co-operate in rural uplift.

In the first place, some aspects of village improvement may require a certain amount of compulsion. Where a village such as Htantabin is situated close to a centre of population which it menaces by its insanitary condition, the case for compulsion, if need be, is overwhelming. Obviously the private agency can not and should not attempt coercion in the field of rural uplift. Government is the only agency which can do this task effectively, except that private agencies may help create a public opinion which in some cases might cause individuals to act through fear of social disapproval. Civilized countries have all discovered

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that universal and free primary education is an essential of civilization, and their Governments have exerted the required amount of compulsion to achieve this end. This suggests another field in which Government alone is competent to act, although the private agency may help in providing schools and in persuading the population of the wisdom of universal education.

The second great advantage of Government in uplift is its relatively greater supply of funds. How long might the Burmese farmer have waited before voluntary gifts would have provided the lakhs of rupees necessary to develop the new Emata and other strains of improved paddy? Again, what private agency would be likely to find the funds with which to carry on the immensely valuable work of Burma's wide-awake Public Health Department?

Advantages of the Private Agencies

As against the first undoubted advantage of Government agencies, it may be pointed out that most fields of uplift require self-help, a *voluntary* exertion by the villager on his own behalf and on behalf of his neighbours. Burmese and British custom and tradition seem to

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unite in favouring a large element of individualism, and eschewing compulsion in the ordinary things of everyday life. Government is handicapped in its efforts at persuasion, (a) because it must needs exert compulsion in many fields, which compulsion breeds a psychological attitude on the part of the villager, making him unwilling to do anything voluntarily which is advocated by the compelling agency; (b) because Government must undertake the unpleasant duty of collecting taxes, and sell-out cultivators who do not pay taxes; (c) because so many of Government's officers, particularly the junior officers, take an officious attitude toward the frightened villager, making him wish to avoid unnecessary contacts with Government.

The second advantage of Government, that relating to funds, suggests a division of labour. Government funds are not unlimited by any means, and no department can employ sufficient personnel to penetrate to every village of Burma for an effective visit even once per year. To try to make such provision would entail a crushing increase of taxation. On the other hand, if volunteer workers, such as the twenty-two Judson College students mentioned

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above, should multiply until they far outnumbered the personnel of the Public Health and Agricultural Departments, they could greatly increase the impact of new ideas and methods, and the financial burden to Government would be increased only in so much as more pamphlets, posters and bored-hole latrine outfits were used. It would be necessary, of course, that the volunteer workers should be of the right kind, unselfish in motive and humble as to their own capacities. But it seems that there is more possibility of advance in this direction, under existing circumstances, than in the direction of a great increase in the subordinate staffs of the various Government departments. For instance, the *akyozaungs*, who assist in the sale of pure seed, could be multiplied indefinitely without burden to the Department of Agriculture. The only limiting factor is the degree of public knowledge and interest in rural uplift, including the knowledge and interest of the more wide-awake villagers. To state the problem in a different manner: it would be impossible to find private donors willing to give the Rs. 9,00,000 annually necessary for the upkeep of the Department of Agriculture. On the other hand, it is not

impossible to find a few thousand volunteer *akyōzaungs* and other workers who will give their efforts free of charge, and whose time, if paid for at the Government rate, would cost Rs. 9,00,000. This suggests that the out-of-pocket expenses should come chiefly from Government, but that most of the propaganda work might be done by unpaid private individuals.

Private agencies have additional advantages. They are generally more flexible in operation. A new idea may be tried and proved a success or a failure without waiting for permission from a bureaucratic authority. In general, rules which in all countries stifle the initiative of most Government officers do not hamper the private agency, so more imagination may be expected. As indicated in the discussion of the well at Mingaladon, the villager is all too prone to regard Government and all its departments as 'milch cows', the source of numerous unmerited favours. He has no conception whatsoever of the problem of balancing the budget, and does not understand why he should do anything for himself which Government might do for him. The private agency may also seem a ready source of special favours which

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come without effort, but the volunteer worker or private agency can much more easily convince the villager that help simply cannot be extended without corresponding effort on his own part.

Financial Support for Private Agencies

Hatch, in his *Up from Poverty*, makes out a strong case for Government aid to private agencies, on the ground that private agencies can put on Agricultural Exhibitions and other shows, and do many other tasks much more cheaply than can Government Departments, so that Government makes a saving by the subsidy. There is undoubtedly a strong case for Government aid in the way of providing free literature and experts who can lecture, vaccinate and otherwise co-operate with private agencies in specific projects. On the other hand, Government can hardly afford to pass money into private hands without the customary restrictions of requisition, audit and numerous rules. Hence the larger the share of its financial resources which comes from Government, the more bound down by tape will the private agency be. At moment, private philanthropists are al-

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conspicuous by their absence in Burma, so there is a stronger case for Government aid to such projects as those mentioned in the previous chapter than there would be were rich gifts made to social service projects on the scale customary in western countries. If the rising interest in rural reconstruction in Burma causes wealthy land-owners, money-lenders and merchants to support this movement with their wealth and then give personal interest and supervision to the expenditure of the money, the villager is likely to benefit more than from an equal expenditure on the part of Government. Unfortunately there is no sign as yet that the rural reconstruction movement has touched the 'money nerve' of the potential giver.

CHAPTER V

WHAT CAN AMATEURS DO?

They are usually Not Specialists

Can amateurs, not specialists in medicine, agriculture or scouting, be of any real help in the village? Perhaps many would give a definitely negative reply. The villager is presumed to have learned more about the business of farming from his practical experience than the townsman will ever know. The town dweller may seek to cause an imitation of sanitary and other conveniences of the town which are out of the question for the impecunious villager.

On the other hand, the answer to many of the farmers' needs—needs which the farmers are often unaware of—is to be found in the city, or can be secured most easily through the help of residents in the city. We all wish there were thousands of doctors and nurses resident in Burma's villages, but when there are not, the next best thing is to take doctors and nurses on visits to the villages, or to have slightly trained individuals do their best to

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relieve suffering, taking the more serious cases to hospitals in the towns.

Untapped Resources

In the towns and cities of Burma are to be found thousands of men and women who have a good general education on the one hand, with a wide range of general knowledge, and a spirit of altruism and friendliness on the other. Under existing circumstances these people *do* have something to give which can help the villager, provided they also have the humility to learn from the villager much that he can teach them, and all that they can learn by patient observation. They must have sufficient common sense not to try to make him give up time-honoured methods for innovations which have not been definitely proved by specialists and time to be suitable for that particular area. Furthermore, the townspeople must be willing to identify themselves with the villagers, helping, for instance, in the actual digging of the soil for a garden, and joining with the children in their games.

A Chinese Example

Mr. C. F. Strickland, C.I.E., I.C.S.:
(Retd.), former Registrar of Co-operative

WHAT CAN AMATEURS DO ?

Societies in the Punjab, visited China recently and studied rural uplift work there for some time. He addressed the Indian Village Welfare Association in London, comparing rural welfare in India and China. Among other things, he said :

I have found that Chinese men and women are going out into the villages, making settlements there, living amongst the people, and working with comparatively little help from the Government; but not always producing the results that might be hoped for from their zeal and enthusiasm, because there is not in China, as in India, a skilled technical Government Department ready at hand and anxious to help them. India has such departments, and they are valuable to non-official workers, though an official may possibly be a little intolerant of unofficial suggestions, as we officials all are . . .

But at the present moment this zeal of educated groups of men and women all over China who go out and settle in the villages, living under village conditions, and do all that they can to make the Chinese people around them a body of citizens capable of eventually governing the country—that is one of the most striking features of modern Chinese life.

Volunteers are Ready

I have been pleasantly surprised with the heartiness of the response of Judson College students to the challenge of village work. A simple request filled a motor car with students and hoes for a visit to Mingaladon, where the college boys stripped to the waist and plied the

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hoes with the same vigour as tennis racquets. It has always been possible to find others willing to make over-night trips to Shwe Pyi, Hlawga and Kauhmyaung, or to live in the villages during vacation. In many other cases students have given up attendance at athletic meets or other functions in order to carry on their rural reconstruction work. Surely any influential organizer in a town or city anywhere in Burma could find a number of young men or women of the same degree of altruism and enthusiasm—people whose energies would be spent in much less useful pursuits if they were not doing rural reconstruction work. All that they need is the initial 'push', to let them see the need, and definite guidance by someone with imagination to find the needs which can be met. It is the chief purpose of this little book to answer the oft-repeated question of such people: 'What can we do?'

Education of the Visitors

In the first place, the organizer may find a few like-minded young people who will accompany him on a weekly trip to some nearby village. The first item must be that of winning the friendship of the people. While this pro-

WHAT CAN AMATEURS DO?

cess is being established, the members of the group should be keeping their eyes open to the actual condition of the village, and to evil conditions which can be corrected. In this latter undertaking, it would be well for them to have read some of the books by Brayne and Hatch mentioned in an earlier chapter, and to compare conditions in Burma with those described as applying to India. Early in the process the members of the group should secure all the leaflets published by the Departments of Agriculture, Public Health, Co-operation, and by the Director of Veterinary Services, and familiarize themselves with the contents. These leaflets and lectures are prepared by experts who know conditions in Burma, and who describe the evils to be met and how to combat them. After a perusal of such literature the amateur rural reconstructor will begin to see things in a village, such as gardens or lack of gardens, livestock, compost pits, playgrounds and latrines, which he would not have noticed otherwise.

How to Secure Public Health Literature—

Those desiring literature of the Public Health Department may either apply to the

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Public Health Officer (Civil Surgeon) of their own district, or directly to the Director of Public Health, Secretariat, Rangoon. The Director can supply inquirers with a complete list of the many publications issued by his department. Each rural reconstruction group should have at least one of these lists, in order that it may make out its requests intelligently. It is usually best to have the literature sent from Rangoon to the Public Health Officer, who can hand it over to the person requiring it. However, those who cannot conveniently visit the Public Health Officer may have the literature sent to them by railway parcels or by mail, without even the cost of transportation.

—and Department of Agriculture Leaflets

Those desiring cultivators' leaflets should in every case write to the nearest Deputy Director of Agriculture. In Chapter II a list is given of the eight towns in which the Deputy Directors have their offices. When possible, it is better to call at the office of the Deputy Director, in order to inspect the supply of pamphlets which he has on hand.

Those wishing to secure literature on co-operation should write to the Registrar of Co-

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operative Societies, Secretariat, Rangoon. Not much literature is published by this department at present, owing to the disaster which has overtaken the movement in Burma. However, a large pamphlet on the organizing of combination market-credit societies may be secured. This, by the way, is the type of co-operative organization which Mr. Case has found successful at Pyinmana, as described in an earlier chapter.

The Director of Veterinary Services writes that, owing to financial stringency, printing of pamphlets had to be suspended over two years ago. However, inquiries directed to the Veterinary Superintendent, Insein, will secure the name and address of the nearest local representative of the department, and personal contact with this representative might lead to the discovery of means of helpfulness.

How to Give out Pamphlets

It is very important that the giving out of these pamphlets should not merely be a mechanical process of transferring a given object from one hand to another. If it seems to the villager to be merely another piece of paper he may welcome it, but he is more

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likely to use it for wrapping a cheroot or for building a fire than for reading. No pamphlets should be given without a previous talk which arouses the interest of the recipient. If five or six householders can be interested in the pamphlets in one afternoon, and if three or four of them actually *read* the pamphlets which are left, the group should not feel that its efforts have been wasted. Even wall posters do not appear to be self-explanatory. The outside of the headman's house at Ingy-ingon was almost covered with Public Health posters, but on a visit two weeks later we found that very few of the villagers had really noticed or mentally absorbed the information contained therein. But when one of the students asked the people to look first at one and then at another, and delivered an eloquent two-minute lecture on each, exciting and answering questions, the posters seemed to have fulfilled their purpose. If such care seems essential in the giving out of posters, how much more exertion is necessary in the efficient distribution of pamphlets! If the group returns to the same houses again and again, it will soon be able to judge accurately whether or not the previous gifts of literature have

achieved any result. From this simple beginning they will acquire both the confidence of the villagers and a knowledge of the villager, his habits, and village conditions which will enable them to branch out into other spheres of work.

Games for Children and Young People

Some groups may include members who are particularly skilful at games for children. Certainly the children of the village will be found to be the most responsive of all. Perhaps it may seem that one must wait a long time until the children grow up and until they begin to put into effect the ideas which may be taught during and between games. However, winning the hearts of the children is often the most direct path to the confidence of their parents. The quickest job of getting acquainted which I have ever witnessed in a village was done by Rev. E. T. Fletcher of Maubin, who visits his villages on cycle, wherever practicable, a chinlone ball being tied on the rear of the cycle. He appealed especially to the young men, and in five minutes a seemingly unfriendly village was all smiles! His own play brought the most

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applause of all, but not precisely the kind of applause secured by the professional player.

Take a Doctor or Nurse

Whenever possible, the group should include a doctor or a nurse, willing to devote spare time to such work without compensation, provided the other members of the group supply funds for the medicines used. The experiences at Shwe Pyi and Ingyingon, and also at a neighbouring village, Kalagon, indicate that the medical appeal is one of the strongest which can be made, particularly if the doctor or nurse is both sympathetic and capable.

Pull Teeth

Rev. E. C. Condict of Thayetmyo has pioneered in another field of service. Being the son of a dentist, Mr. Condict noticed the great amount of suffering caused by decayed teeth, which were left to fall out. While on furlough he learned from his father the various movements in extraction, and returned with a number of forceps. Before long he was extracting more than one thousand teeth per year. In 1933, for instance, he extracted 1,278 teeth, and his assistant Samo Tun Pa



By courtesy of 'New Light of Burma'

Intestinal parasites take the joy out of life for many a village child. This Rangoon doctor gives his services on occasional Sundays to visit Shwe Pyi, where no qualified doctor or nurse ever penetrates, except on such occasions.

extracted 437 more. Mr. Case and others have added tooth pulling to their other accomplishments, although no one has as yet equalled the 'pull' of Mr. Conduct.

Sell Cinchona Febrifuge Tablets

Malaria is so common in many Burmese villages that occasional visits, with quinine or cinchona tablets as part of the equipment, hardly fill the requirements. As Brayne observed several years ago, the peasants should learn to pay for their own quinine just as they pay for their own rice. It might be added that, in malarious localities, they should have the quinine or cinchona tablets as readily available as rice. The most which outsiders should do would be to treat a few patients with Government cinchona febrifuge tablets, which they can secure from any Sub-Treasury for As. 2 per 18 tablets, if one member of the group applies through the District Health Officer for a license. When the villagers have been persuaded by this practical demonstration, as well as by pamphlets, the malaria poster, and perhaps lectures, that cinchona tablets are the proper treatment, an agency for their sale should be established in the village. By this

time the group should be well acquainted with the village, and should be able to choose some person who would make the necessary efforts to persuade the villagers to use the tablets whenever necessary. This might be done by applying for a license for the school teacher, who could buy directly from the Sub-Treasury, as was done at Shwe Pyi. If, however, the village is some distance from a Sub-Treasury, it might be most convenient for a member of the group to sell quantities of tablets to the local agent at cost price, saving the latter the trouble of a trip to a distant town for supplies. In Karenni, Rev. Lester Raney is himself the holder of a license, and takes the supplies to certain villages where they are sold by pastors and others at or below the authorized price.

A friend of mine, interested in providing quinine for a village in Hanthawaddy District, spent a whole day visiting the Sub-Treasury in Twante and innumerable offices in the Secretariat and elsewhere before solving the problem. Enthusiastic rural workers will doubtless find that some Sub-Treasury officers do not enthuse over this seemingly trivial addition to their duties, and that they do not have the cinchona febrifuge tablets ready for sale. When such a

case is found a real service to rural uplift will be done if a written report is made to the Deputy Commissioner concerned, and a carbon copy sent to the Director of Public Health, Rangoon. A few dozen enthusiastic private citizens, scattered throughout the province, could soon bring all of Burma's Sub-Treasuries up to the mark by this simple measure, since the superior officers can be depended upon for support.

Arrange Meetings for Government Officers

The villagers are likely to sense the importance of improvement if they realize that their town visitors are part of a larger movement, Burma-wide in scope. Hence it would be well, fairly early in the process, to organize a meeting to be addressed by a Government expert in agriculture or public health. If the village is not too remote, and if a good attendance can be assured, the Deputy Director of Agriculture is almost certain to welcome an opportunity to send a Senior Agricultural Assistant to represent his department, and to take along samples of seed, *theikpan* ploughs and perhaps other means of improvement. In a similar manner, an application to the Public

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Health Officer of the district is almost certain to secure the services of a Public Health Inspector. Magic lanterns are not stocked in all district headquarters, but if a request is made sufficiently in advance, it is likely that the Inspector can bring a lantern lecture on cholera or smallpox, and thus make the occasion much more interesting. A word of warning might be in place here. In two consecutive instances where we have secured the services of an Inspector with a lantern, the lantern has been sent in from a different district. It was not inspected in headquarters, and therefore, before the lecture could be given, but after the crowds had collected, it was necessary to spend much time repairing and adjusting the lantern. In some tactful manner, therefore, the rural reconstructor should make sure that the lantern is inspected and put into working condition before the spectators gather.

Organizers must Secure Good Attendance

Rural workers should, of course, realize that Government officers are limited in number, and have many duties. Therefore, a request for assistance should not be made unless those concerned are prepared to take pains to assure

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the attendance of a large number of villagers. In this vital matter of attendance, they are in a position to do a piece of work which it is impossible for the Government department itself to undertake. The more successfully the workers have done the previous job of winning the hearts of the villagers, the more successful will they be in assuring adequate attendance at public lectures.

In cases where it is possible to secure large attendances in a series of five to ten villages, on successive nights, it might be possible to secure the eloquent services of the Hygiene Publicity Officer, with his interesting motion pictures. Since there is only one such officer, it is obvious that rural workers should not count on his services, but should feel very fortunate if they can secure them by making a request long in advance. Our experience at Shwe Pyi proved that if the movies were once exhibited in the village, the villagers quite lose their taste for lantern lectures, the *yok-thes* being considered much less exciting than the *yok-shins*.

It will be more efficient to have the Public Health Inspector perform several functions at one visit. If a considerable number of villagers are without recent smallpox vaccinations,

it might be well to have the lecturer touch on this subject, and vaccinate those who are willing on the spot. He may also bring chloride of lime and demonstrate the chemical purification of well water.

A Fundamental Problem—Debt

Apart from health, the most vexing problem facing the agriculturist in Burma seems to be that of debt. The interest rates paid by Burmese farmers are considerably higher than those paid in most parts of India, and several times as great as those paid in Europe and America. Because of the Burmese philosophy of life, excessive expenditures on *ahlus* and various other ceremonies, and for other reasons, the Burman is a chronic borrower. These two facts have combined to deprive him of his land until, at the present time, the chettyar owns one-fourth of all the agricultural land of Lower Burma, and has mortgages against much more land, which he could foreclose if he wished. In some districts near Rangoon, two-thirds of all the agricultural land is owned by non-agriculturists. The actual farmer, therefore, has become a tenant, and in the majority of cases the only interest of the

money-lender who owns the land is to secure the maximum revenue as soon as possible. Thus we find the tenants moving from holding to holding and village to village, with a considerable proportion of the residents of many villages consisting of the transients who have no permanent interest in the welfare of any particular village. The terms of tenancy have become so strict, by reason of the competition among tenants, that only the most strenuous application to the task in hand, plus considerable skill and a certain amount of luck, can give the cultivator a surplus above a bare subsistence level. Without a permanent interest in the village, and without this surplus, the course of agricultural and public improvement is likely to be a hard one.

Co-operative Credit requires Skilful Handling

It is difficult to find a practical solution to this problem. The obvious way out is to introduce co-operative credit societies, simultaneously with a campaign for thrift. Thousands of co-operative credit societies actually were introduced into Burma during the first quarter of the present century. But the thrift part of the campaign was neglected in some cases, and

fell upon deaf ears in others. The Calvert Report on Co-operation, in 1928-9, indicated the decay of many societies, and the Burma Provincial Banking Enquiry Committee of 1929-30 admitted the failure of many more. The reasons for this egregious failure are manifold, and many are technical in nature, but it would seem that lack of thrift, and lack of a widespread spirit of common honesty were very outstanding causes. Until these lacks are removed, rural workers must be very cautious about attempting to organize co-operative credit societies.

The co-operative Spirit comes First

I remember talking with a prominent member of the Co-operative Department a few years ago. He said that he did not wish to see many new credit societies formed for the next few years. What he did wish to see, however, was the formation of a number of simple societies which would take as their objectives such items as the repairing of village roads, the provision of wells, and other things which villagers could provide for themselves, without borrowing outside money. In this way, he felt, it would be possible gradually to

train the people in the psychology of co-operation, in ways which they could understand. Then when they had learned the simpler lessons, it might be possible at some future date to urge them to advance once more to the more difficult stage of credit co-operation. All should ponder this sane advice. Certainly the villagers whose holdings have been 'sold out' by the co-operative movement will form a tremendous obstacle to future experiments in credit co-operation for years to come. The fact that they and their neighbours were to blame for the evils which befell them is an unpalatable truth which they completely ignore. For strangers to go into a village where a credit society has failed, and start advocating another experiment of the kind, would be very unwise in the present circumstances.

Perhaps the word 'co-operation' should be avoided. But rural reconstructors can find many worthwhile projects about the village in which co-operative action will not only benefit the village but give needed training to the villagers. A nation which has become accustomed by centuries of tradition to following village headmen and various feudal leaders can hardly be expected to change over instantly to a

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system which involves thought and responsibility on the part of each member. However necessary credit co-operation may be to a final solution of Burma's problem of agricultural indebtedness, we might as well start at the beginning, and undertake the long, slow process of education before outside money is placed in the hands of village committees. How much remains to be done along lines of training for social responsibility is brought home by the receipt of a letter, as these lines are written. Maung Ba Shin, the Judson College student who has been living in Shwe Pyi, Ingyingon and Mingaladon villages, while supervising the construction of wells, sends a report of progress. When he was absent from a village in which work was going on, any little obstacle like the filling in of sand at the bottom of the well would cause operations to be suspended until he returned to encourage greater effort. He left Ingyingon with everything completed save the erection of the standard on which the pulley could depend, but on a later visit he found that this had not been done, so he had to stay in the village and exert 'moral suasion' upon the headman until this final job was done! Discouraging? Perhaps, but what

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previous training would cause them to act otherwise? And what other method can there be of developing self-help, but by giving such villagers definite self-help projects, and permitting them to manage these projects themselves to the fullest practicable extent?

Special Projects

The starting of a project in road-building, well-digging, latrine-boring or gardening will assist in creating enthusiasm for improvement by giving some tangible and definite project upon which villagers may expend their energies. At Mingaladon, projects were slow in forthcoming, and some members of the Improvement Society began complaining that the Society's activities consisted exclusively of talk. On the other hand, the starting of a project calls for effort on the part of members which may displease some. Furthermore, there will always be disagreement as to which road should be improved first, where the well should be situated, or which vegetables should be planted in the garden. The greatest argument in Mingaladon was whether the small corner of a compound where the well was to be dug should be deeded to the Improvement

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Society or merely thrown open to the public for 50 years! These inevitable differences of opinion will no doubt exasperate any rural reconstructor, but there seems to be no other way of developing a capacity for self-help, unless one falls back upon the method of paternalism or dictatorship by the village headman or the landlord.

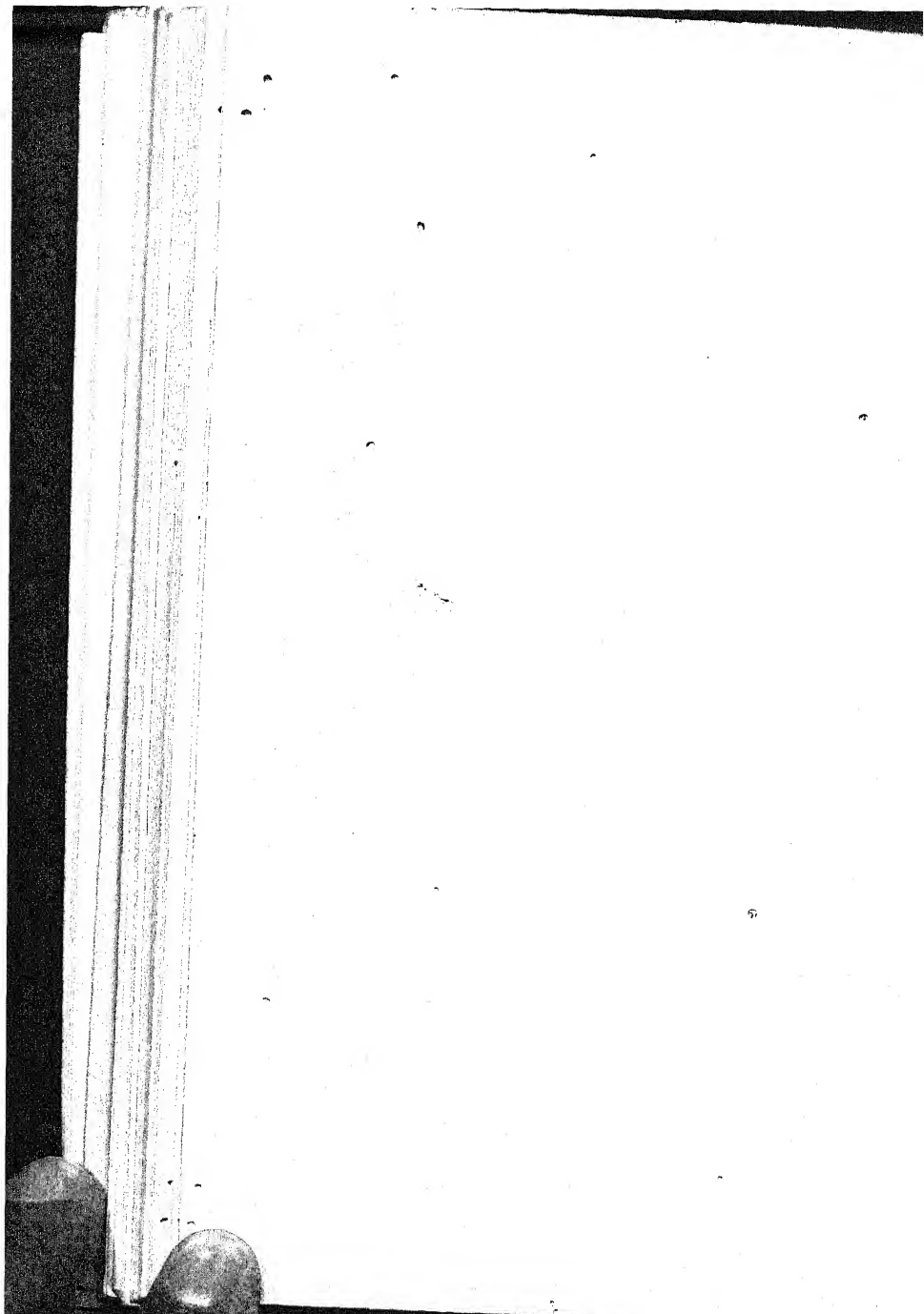
If a group goes to a village from a large town or city, and finds that the village produces vegetables, eggs or other products in general demand in the city, it might be practicable to assist in the organization of a co-operative marketing society. Some members of the group may have specialized knowledge of markets, which will enable the villagers to secure better prices for their products, and a more regular market. When this is done, the experience of the Co-operative Department and of Mr. Case indicates that a credit society may be started with greater safety, provided loans are repaid in produce, and provided the one who receives the money for the produce applies a portion of it to the repayment of outstanding indebtedness.

Groups which contain members hostile to the rearing of livestock for food, and groups



By courtesy of 'New Light of Burma'

The new village well at Shwe Pyi. The villagers contributed all the labour, including the erection of a thatched roof over the well.



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working in villages in which there is a prejudice against this occupation, will not wish to encourage the rearing of chickens and pigs. Where neither of these conditions prevails, however, the outside group can do a real service by assisting in the sale of the produce, and by the introduction of pure-bred cocks or boars. Both cocks and boars may be purchased from the A. B. M. Agricultural Farm at Pyinmana. Cocks may also be secured from Rev. C. E. Olmstead of Creek Street, Rangoon. When this is done, care should be taken to reduce the number of ordinary cocks or boars in the village, or to eliminate them altogether, so that the next generation of livestock may be half of the improved variety. On the next cross they may be brought up to three-fourths purity. The villager regards the writing of a letter as a major act, to be performed, like marriage or the begetting of children, on but a few occasions in one's lifetime. He may therefore be willing to have and to pay for a pure-bred Barred Rock cock, but neglects to do so because of the ordeal involved in the business of writing a letter and receiving the cock. The city dweller usually finds these items the simplest of all those connected with rural

reconstruction, and can offer his services with great benefit to the villager.

The Viceroy sets a Worthy Example

His Excellency the Viceroy, in an address at the Viceregal stables, 22 April 1936, presented two pure-bred stud bulls to the people of Delhi District. These bulls are being taken in lorries, at Lord Linlithgow's expense, to all parts of the district, for breeding with selected cows. Lord Linlithgow appealed to other wealthy men to imitate his example and provide more bulls for improving the quality of Indian cattle. Land-owners in Burma could also purchase first-class bulls, after consultation with veterinary officers, and donate the services of these bulls to the improvement of the cattle of their poorer neighbours. A group of rural reconstructors might pool their gifts for a similar investment.

The rural reconstructor can find no book or listen to no speech which will tell him just what projects should be introduced in the village in which he wishes to work. He must constantly observe conditions and seek for new opportunities for improvement. If he finds a good and ample deposit of clay, near a village,

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and also a supply of fuel within a reasonable distance, he may assist in the starting of a pottery industry. The writer noticed these two raw materials at Myittha village, Tavoy District, some years ago, and suggested that two boys from the village should come to Insein to learn pottery. Nothing came of the suggestion for some time, but during the hot season of 1936 the drawing master of the Karen High School, Tavoy, did spend some time in Insein learning the business, that he might teach the children of Myittha, who were in his school, of this new possible source of income. In other cases weaving, basket making, the making of paddy grinders and of other agricultural implements may be suitable local industries. Once more it is in the vital matter of marketing that outsiders may render most assistance. They may also, in certain instances, put the villager in touch with the technical advice necessary for a new local industry or for improving an existing local industry.

The Challenge of Rural Teacherships

Throughout the world the great majority of teachers prefer posts in the larger centres, rather than in the rural areas. But sometimes

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one finds in rural areas teachers who might have had posts in the city, but who definitely prefer the call to service in the more needy school of a village. If the present popularity of rural reconstruction in Burma turns the attention of a number of young men and women of real promise to this neglected field of usefulness, we may hope for steady progress as the years pass. Many of the improvements suggested above, such as the provision of sanitation, wells, roads and gardens seem to be objective, external improvements. But the rural workers who try to introduce them will soon discover that their obstacles are largely intellectual and moral. When the villager has never heard either of Pasteur or of the disease germs which Pasteur proved to exist, it is mere superstition to him to insist on boiling river water. The reformer's fear of the invisible germ will seem to him at best no more intelligent than his own fear of evil *nats*.

Even though the villager be intellectually convinced that a village well or a large number of bored-hole latrines would increase the health of the village, he usually requires a moral or spiritual awakening to make him lend a hand himself, rather than wait for the benefits to

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come from Government or from the exertions of others. Furthermore, moral and spiritual education becomes necessary to hold a group of people together in the pursuit of a common end, without fatal jealousies and disagreements.

In all of these respects the village school may perform a most important function. If reading and the other subjects are taught with books with such a practical rural bias as *Socrates at School*, the child will grow up to feel that it is the normal, intelligent thing for him to undertake to improve village life. He can be taught the rational reasons for sanitary precautions until they become part of his subconscious life, just as in the case of the European who would turn sick at the thought of drinking the filthy river water consumed by so many Burmans. School gardens are already a part of the student activity in many town schools of Burma. When each village school has a garden, cultivated co-operatively by the pupils, the art of working together harmoniously will be imbibed along with the more literary part of the curriculum. The science of dietetics may be made interesting if it is taught with the pupils' garden products as the

object lesson. Thrift may be inculcated in the same manner. Games and entertainments may also develop the spirit of team-play, which can be utilized in later years in all the ways indicated above and more besides.

Use the School Building at Night

Either the resident teacher, or visitors from the town, may stimulate the use of the school building and property for a programme of organized games and recreation for old and young. The school building should not be left unused during most of the twenty-four hours. Evening classes may attract adults who wish to improve their minds in various ways, and lectures with outside speakers may attract many. In some cases even debates and discussions among the villagers may arouse interest. Games of chance appear to be all too common already, with their temptation to gambling, so the wise rural worker will stress games played for fun, and to show skill, as well as those which develop healthy competition and teamwork, friendship, fair dealing, energy and alertness. Football, volley ball, ball relay and pole relay races have been found effective by Mr. Case. 'Hill, Dill, come over

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'the hill', cross tag, tree spirit, *nyaungbin taseh*, catch the robbers, and 'Tut Tut Toe' may also satisfy all requirements. Other games may be played around a circle, such as snatch the handkerchief, drop the handkerchief, steal the turtle eggs, partner tag or *kywet hmint kyaung*, it's hot, pass it on, and 'teacher' says 'Do it'. Hiding games include hide the thimble, ring on the string, and hide and seek. Guessing games, such as who has the pice?, blind man's buff, and what is mine?, may arouse considerable interest. If quiet games are desired, fifteen things on a table, putting on the donkey's tail, how many ways to walk?, and what name is on my back? will all serve the purpose.

The thirteen Public Health posters might well adorn the walls of every rural school, and occasional reference should be made to them by the teacher. Many schools already use them.

The Parent-Teacher Association, so common in the west, and becoming common in the cities of Burma, might be tried as an experiment in the village. Finally, the school is the natural centre for demonstrations, exhibitions and shows.

What the Town Teacher may Do

The teacher in a town school is often very favourably placed for commencing work in the village. He can find a nearby village from which pupils come to his school, so that he can secure the best kind of introduction to the parents. He usually has two days per week free for such activities, and some forms of work, such as recreation and lecturing, as well as distribution of literature are likely to be easier for him to undertake than for most others. Teachers in high schools may enlist the active support of Scout troops and other students.

Village Scouting

The achievements of Saw Timothy and wife, described in the third chapter, show what can be done with Scouts and Girl Guides. The Scout insistence upon the daily good turn may be used to make the cleaning of the village a sport, rather than drudgery. Such seems to have been the case in many villages in Gurgaon District, Punjab. Where the future *luggis* of the village are trained in the tradition of the good turn, the eventual success of genuine co-operation is assured. Scouts

frequently have more leisure than their fathers, and thus can afford to put in gardens, dig and fill compost pits, and repair the roads, when their fathers would feel that to do so would deprive the family of its daily supply of rice. The Judson College Rover Scouts are taking up scouting in villages where the older men are not sufficiently responsive. Scouting may easily broaden the horizon of the boy in a manner which ordinary schooling will not. Woodcraft, love of the outdoor life, keen observation, kindness to others and voluntary service are good for any boy. The arts of the American Indians are frequently taught to western scouts, but in Burma the arts of the jungle Burman would be more appropriate. Urban scoutmasters and their older scouts may easily accomplish much in this connexion, but regular supervision is required.

The start, in village scouting, may be made either with a group of boys gathered for play, or with selected pupils of the village school. The course outlined in *First Steps in Scouting*, or the Burmese *A Sin Thint*, may be followed. Gardening and other useful hobbies can be found at hand, and an occasional hike will help create enthusiasm for the

movement. I am indebted to Mr. Case for the above suggestions. Four selected centres have scout troops under the influence of the Pyinmana Agricultural School. Pyinmana seeds are furnished for the garden projects, and regular supervision is given, along with technical advice. Children who continue for some years with gardens also receive good varieties of fruit and plantain trees.

Take Magazines and Newspapers

Any group going from a town to a village should remember to forage about for back copies of vernacular newspapers and magazines. Sometimes gifts of books may be obtained and a library started without expense. Perhaps in time the villagers may be persuaded to subscribe to such helpful Burmese magazines as *Kyipwayay*, *Totetyay* and *Myanma-hita*. Shwe Pyi villagers have recently subscribed for a newspaper, and Ingyingon villagers for a first-class magazine. Burma is behind most agricultural countries in not having a widely-read magazine dealing exclusively with topics of village interest. It is encouraging to find these three magazines and others, however, devoting some space to articles of

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special interest to villagers and rural reconstructors. The editor of one of them has just given us 50 copies of recent issues of his magazine for free distribution. A great work still remains to be done in the provision of literature which will assist in raising the standard of village thinking and life. If stories, articles of current interest, and scientific articles could be produced in great numbers, in simple language, and with a definite rural bias, and if the magazines and newspapers in which they appear could be placed in the hands of villagers, the entire movement would receive a great impetus. There are signs that this is already being done on a small scale. Editors and writers have a definite place in rural reconstruction.

How to Provide Bored-Hole Latrines

Rural reconstruction groups which operate in a large number of villages may find it desirable to purchase a bored-hole latrine outfit. This can be secured for Rs. 122, delivered anywhere in Burma, upon application to the Director, Rural Health Unit, Hlegu. Groups and individuals unable to make this investment may secure the loan of the apparatus, also

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free of charge, upon application to the same authority, through the local Public Health Officer. However, anyone contemplating this action should first distribute pamphlets on the subject, call attention to the poster, and make sure that the villagers really want sanitary latrines badly enough to undertake the manual labour necessary for the digging process. From five to eight men are necessary, and two latrines per day are about all they can expect to complete. One per day is a common rate of progress. Complete plans and instructions accompany the outfit, so that amateurs do not need to fear technical difficulties. Wealthy villagers may prefer to hire coolies to install their latrines, while the others will prefer to take turns doing the work.

Encourage Villagers to Visit Demonstration Farms

Sometimes villagers living within easy reach of Government experimental farms and demonstration plots have never taken the trouble to see what is being done there. Whenever a village is situated in this manner, an excursion should be arranged, and as many farmers and their sons as possible persuaded to

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go. In cases where special courses in agriculture are given at these farms, enrolment should of course be stimulated. Attendance at the Annual Workers' Institute, of the Pyinmana Agricultural School, held every October, is helping many farmers and teachers to get a broader vision of village uplift as a whole. The four-year course at this school is a big undertaking, but if, as at Shwe Pyi, rural reconstructors can persuade one or more boys of the right kind to undertake it, they can be sure of a strong and permanent influence for uplift, right in the village.

Agricultural Shows

One Deputy Commissioner has been very active in organizing agricultural shows in the chief centres of his district. The various Government departments concerned with rural life have a share in these shows. Public-spirited local citizens are required to assist in the organization and entertainment. This form of rural reconstruction represents a rather advanced phase of the work, but groups which have successfully completed the simpler undertakings might profitably undertake it. Both Brayne and Hatch, in India, lay great stress

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upon the agricultural show. A perusal of their books would profit anyone contemplating a similar undertaking in Burma.

One rather experienced and thoughtful rural worker who attended a show in the district mentioned above reported that the local organizer, who was also a candidate for the Legislative Council, had so arranged the affair that it was more of a social than an educational or inspirational show. Great sums were collected from the local people and spent in lavish entertainments, to impress the distinguished visitors. A *pwe* troupe was imported from Rangoon, but the common villager, for whose benefit the show should have been conducted, did not get very much in the way of practical hints as to how to improve his life with the aid of the Departments of Agriculture, Public Health, etc. The exhibits of these two departments were present, but they were far inferior to those put on in Rangoon at the annual Health Week and Arts and Crafts Exhibition. When such shows are put on year after year, managed, as in the case of these two Rangoon exhibitions, by people with long experience in actually helping the villagers, these weaknesses will be less likely to develop.

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U Kya Bu, Senior Agricultural Assistant at Taunggyi, has demonstrated in a small way what can be done by ambitious young men who are willing to devote their spare time to rural reconstruction work. With a number of his friends, including a doctor, he organizes visits to villages in the vicinity of Taunggyi, where many of the activities mentioned above are promoted.

A Summary

In summary, then, we may say that the chief fields of service open to the amateur rural reconstructor in his chosen village are :

1. Distribution of literature and posters.
2. Organization of meetings to listen to Government and other specialists.
3. Dispensing of medicines and simple medical treatments.
4. Providing for vaccination of villagers and chlorination of their well water.
5. Finding of the Rs. 35 per month necessary to secure a trained nurse to live in the village.
6. Provision of an agency for vigorously promoting the sale and use of cinchona febrifuge tablets.

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7. Digging of bored-hole latrines.
8. Provision of masonry wells for drinking water.
9. Games for children and adults.
10. Evening classes and other activities for adults.
11. Donation of books and encouragement to start a village library.
12. Donation of old magazines and newspapers, and encouragement to villagers to subscribe to one magazine and one newspaper at least.
13. Scouting and Girl Guide work.
14. Encouragement of gardening by provision of seed, expert advice and a market for surplus produce.
15. Encouragement of livestock rearing, unless this would offend religious susceptibilities. Provision of pure-bred males.
16. Provision of a superior stud bull for use by village cattle-owners, either free or at a price within their means.
17. Encouragement of co-operative sale of produce, and (later) of co-operative credit, based on this co-operative marketing.

WHAT CAN AMATEURS DO ?

18. Improvement of village roads.
19. Organization of trips to Government experimental farms and demonstration plots.
20. Encouragement to enrolment in the courses of agriculture at the chief experimental farms or at the A. B. M. Agricultural School, Pyinmana. Also to attendance at the October Institute of the latter school.
21. Selection of one or more suitable cultivators to apply to the nearest Senior Agricultural Assistant for the status of *akyozauung*. The town-educated rural reconstructor to do the letter-writing necessary for this and other projects.
22. In some cases villagers should be encouraged to drain stagnant pools near their villages. This can hardly remove the mosquito menace, but it can at least mitigate it.

What Landlords might Do

As indicated above, one of the gravest problems facing agricultural improvement in Burma is that of tenancy and land tenure, following

RURAL RECONSTRUCTION IN BURMA

the failure of the Co-operative Movement and other efforts to prevent the peasant proprietor from losing his land. Most people would doubtless agree that, ideally, the peasant proprietorship should be the predominant one in Burma. However, the tendency is all the other way, and no sign of reversal is to be seen as yet.

This condition is not necessarily a hopeless one, however. It is true that peasant proprietors have built up a splendid agricultural economy in Denmark. But the English system of large estates seems to have secured a reasonably wholesome life for the agriculturist also. More than a century ago the Agrarian Revolution took place in England. Scientific agriculture was the order of the day, with 'Turnip' Townsend and other leading advocates. King George III was an enthusiastic member of one of the Agricultural Societies, and noble land-owners followed his example, vying with one another in the introduction of improvements. One of P. G. Wodehouse's humorous stories tells of an earl who was greatly annoyed, while preparing a mammoth pumpkin for the forthcoming Agricultural Show, to have his attention called to the trivial fact

that his son was about to make a supposedly undesirable matrimonial match! Instead of living at a distance and squeezing out the last shilling in revenue, the typical English landlord has been proud of his calling, and has not regarded his land with the same unsentimental detachment which the speculator feels for the great company whose shares he holds at the moment. He has ordinarily lived on his estate, known his tenants and perhaps their labourers personally, and upheld with dignity, and in some cases with brilliance, his position as the leader of local life. Cambridge and other English Universities offer extensive courses in agriculture, and Rothamstead is world famous. Contrast this condition with that in Burma, where the Agricultural College at Mandalay was obliged to close because of the failure of landlords to send their sons there for training!

If the landlords of Burma cease to live exclusively in the towns, and come to regard land ownership as a means of fulfilling an important social function, the greatest possible assistance will be given to village uplift. It would be a simple matter for landlords to insist upon the use of pure seed, and then to arrange

with the paddy-buying firms for the sale of the crop at a premium, because of the large amount supplied from a standard and superior strain. The mere knowledge on the part of the villagers that their landlord was vitally interested in improvement would go far in producing a psychology less inimical to change. The use of improved ploughs and other implements could best be stimulated by resident landowners.

The landlord may find it possible, himself, to stimulate most of the twenty-two activities listed above, particularly the education in agriculture of his own sons and the sons of his tenants. Further, he may keep in touch with the agricultural schools, and offer tenancies to their graduates on favourable terms which will encourage these young men to continue for several years on the same holding, until they know it well and can give of their best to its scientific cultivation.

A Progressive Landlord

At the Kyauktaga Grant, Captain Winters is definitely encouraging village uplift work. Saw Pan Bu, graduate of the Pyinmana Agricultural School, has been a tenant since

WHAT CAN AMATEURS DO ?

1933, and now has three other graduates as colleagues. Saw Pan Bu's 1935-6 crop was definitely superior to the crops of other tenants. His garden and pigs were also much ahead of the average. His colleagues were producing their first crop, and just about equalled the average of the estate. It is to be expected that with this experience they will be able to equal Saw Pan Bu's record in the future.

The Kyauktaga Grant consists of about 30,000 acres of paddy land between Thategon and Kyauktaga railway stations, brought under cultivation and now occupied chiefly by Indians. In a report of the Rural Reconstruction Committee of the Burma Christian Council Captain Rivers wrote :

The whole success of the grant depends on personal contact. I personally visit every village once a week and any one knows that if he has any report or grievance to air, he can see me in my office.

Besides myself, I have a European manager, whose interest is the welfare of the people and under him he has police for protection of the tenants, as well as surveyors and clerks.

When I first came to Kyauktaga, I found that the tenants were being robbed by the Chetties and money-lenders who were taking anything up to 50 per cent compound interest. This difficulty was overcome by opening a bank where the tenants can get agricultural loans at a moderate interest (12 per cent).

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During the last year of depression we have attempted to reduce tenants' expenses and increase their income. This we have achieved by irrigation schemes and encouraging dry-weather crops. I hope they will be self-supporting except for salt and kerosene oil.

Example of a Sawbwa

Some of the Shan States rulers, including for instance the Sawbwa of Mongpaw, are adopting an attitude toward their village people which compares favourably with that of the most enlightened landlords of England or other countries. This progressive ruler has sent Shan boys to learn scientific agriculture at Pyinmana and elsewhere, and has made his personal farm a 'demonstration farm' under the technical advice of the officers of the Department of Agriculture. He has just purchased a bored-hole latrine outfit from Hlegu for extensive and permanent use in his villages. He has made arrangements for the permanent sale of a superior grade of Shan paper in Rangoon, and has various other plans for the uplift of his subjects.

It seems likely that, for some years at least, the sawbwes will resist the pressure to allow state lands to become alienated to private owners, which latter action in Burma has been

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the prelude to ownership by the money-lender. While the standard of education is lower in the Shan States than in Burma proper, the stream of village boys being sent for practical training in agriculture and other subjects bodes well for the future of Shan village life.

Truly the work of village uplift in Burma is sufficiently complex and important to absorb the best efforts of the landlord, the sawbwa, the teacher, the scoutmaster, and a host of others who will give unselfishly of their time and effort.

•The M Co. •

THE
CONTROL OF TRUSTS

AN ARGUMENT IN FAVOR OF CURBING
THE POWER OF MONOPOLY BY
A NATURAL METHOD

BY

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New York

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PREFACE

THE purpose of this little book is a modest one. It does not attempt to duplicate work which has been well done by others. It contains no history of trusts and no description of the forms that they are now taking. It refers the reader to the works of Professors Jenks, Ely and Von Halle, and to the reports of the Industrial Commission, for facts concerning these consolidations and confines itself to the one object of advocating a certain definite policy in dealing with them. It is the policy that relies wholly on competition as the regulator of prices and wages and as the general protector of the interests of the public. It welcomes centralization, but aims to destroy monopoly, and to do this by keeping the field open to all independent producers who may choose to enter it. By this plan a man who builds a mill and puts on the market goods such as a trust is making must take all the chances that fair competition entails; but he will be shielded from certain predatory and

unfair attacks, in which size gives to the consolidation a decisive advantage. It is competition, real or potential, that now partially protects the public and makes the present situation endurable. If prices are raised beyond a certain level, new mills are built; and a wholesome respect for the influence of these mills acts in advance of their existence to hold prices in check. It is possible, as this book maintains, to give greater efficiency to this regulator. If this is thoroughly done, the menacing corporations will become servants of the public; and their great power will serve to secure for America cheap production, increased exportation, and commercial and financial dominance among nations. It will tend to make wages rise, to increase the savings of laborers and to afford an enlarged field for the investment of such accumulations. It will tend also to give steadiness to the movement of business and to diminish the violence of commercial crises. In the view that is here advanced, political democracy depends for success largely on the solution of industrial problems; and a condition that shall create many small fortunes, besides a few gigantic ones, will produce the personal material of which a democratic state needs to be made. The *demos* will

then not be an empty-handed and hungry proletariat, but a body of conservative and intelligent citizens.

Even the argumentative part of this book is brief, and aims rather to call attention to the plan that it advocates than to discuss it in any exhaustive way. It is the author's belief that circumstances will, in any case, force us to adopt a line of policy which is either identical with this one or akin to it, and that it is necessary only to win public attention for the plan here suggested, in order that costly experiments and more costly delays may be avoided; for it is the country which shall early get the benefits and avoid the dangers that trusts bring with them which will attain a place of leadership.

The book is composed mainly of articles which have appeared in the *Political Science Quarterly*, the *Atlantic Monthly* and the *Independent*. These articles are here reprinted, in whole or in part, with only such amplification as is necessary in order to bring them into a connected series. If the logical sequence is not at all points exactly what it would have been if the book had been written *de novo*, the reader may, perhaps, excuse the fact in view of the origin of the work. The writer desires to express his thanks to the editors of the several

periodicals for the permission which they have kindly given to use the articles, and to Mr. Arthur M. Day, Instructor in Political Economy in Columbia University, for very valuable aid rendered in connection with the revising of the proof.

COLUMBIA UNIVERSITY,
NEW YORK.

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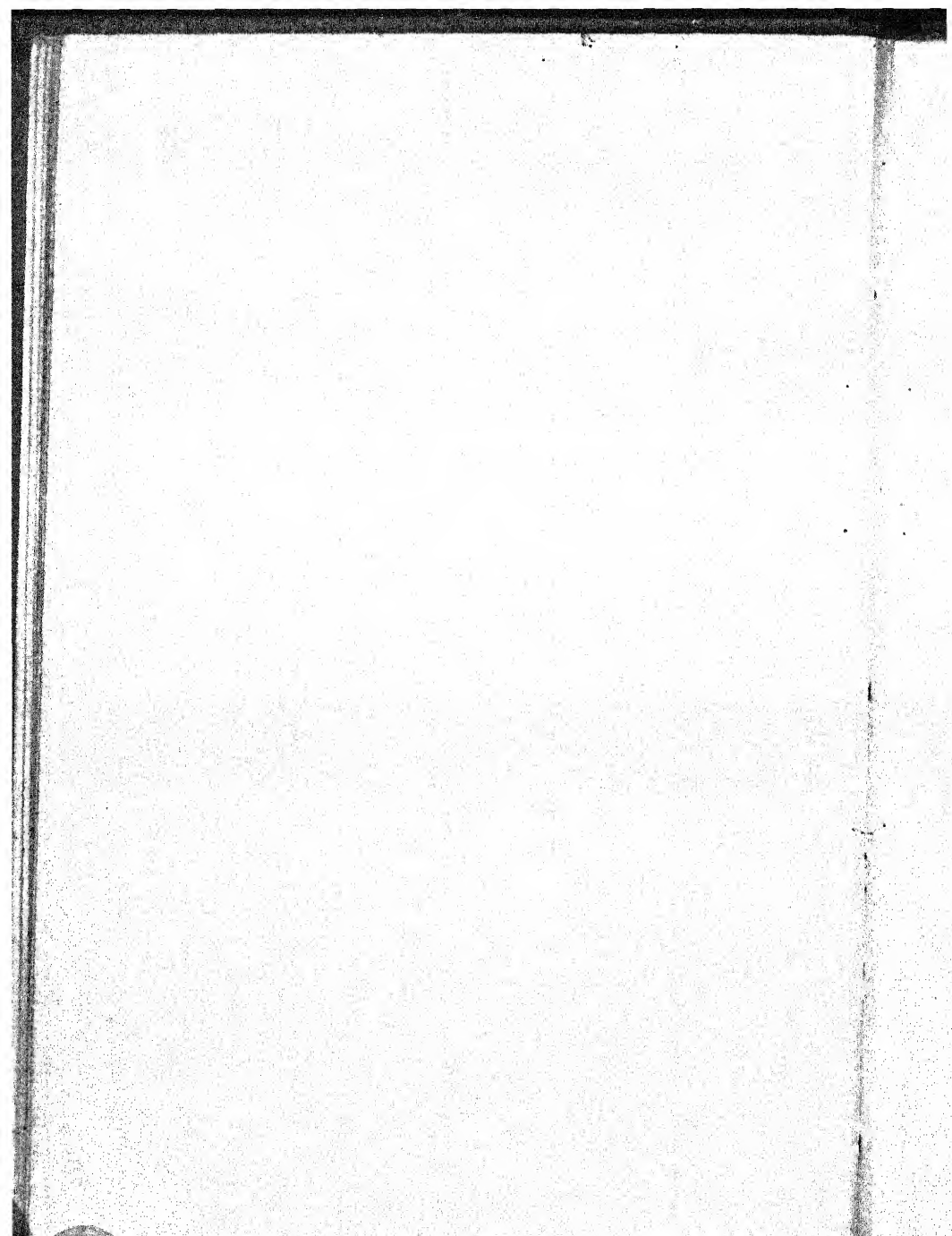
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THE CONTROL OF TRUSTS



THE CONTROL OF TRUSTS

CHAPTER I

THE PEOPLE AND THE PROBLEM

AMERICAN industry has recently gone through a rapid and startling evolution. Consolidations of capital, which look like monopolies, have come, apparently to stay. Just as we were beginning to understand an economic system in which competition ruled, the system transformed itself into one which is seemingly based on the repression of the competitive process.

The feeling of the people concerning this change has gone through two distinct phases. There was an early period of alarm, as the seeming monopolies developed. This was followed by a period of reassurance, as the fact appeared that some influence was holding these monopolies in check and that they could not do their worst. Perceiving that they neither

raised prices nor depressed wages as they would have done if their mastery of the situation had been secure the people assumed toward them a more tolerant attitude. Since then views have become divergent and different classes of the people have developed unlike opinions. The so-called trusts have a few pronounced friends and many pronounced enemies, while in the background, and constituting the jury before which the case is to be tried, is the undecided majority of the people. By their acts the trusts are furnishing evidence and are revealing their real nature; and they must accept, in the end, the verdict which the public will pronounce. The nation will have its way when it knows what it wants.

In September, 1899, there was held in Chicago a conference on the subject of trusts. The members of it represented many sections and many interests, and the addresses that were delivered may be taken as revealing the position of the American people on the question of monopolies. In advance of the fuller expression of the popular feeling that will ultimately be given, this conference, perhaps,

affords the best means of perceiving at a glance how the people of this country think and feel, and how they will probably act, in relation to those vast corporations which are acquiring a certain monopolistic power.

The most encouraging fact that has come to light is the existence of a limitless amount of moral earnestness—a feeling of antagonism to real monopoly—that is uniting people, particularly in the South and West, in a crusade which has a remote resemblance to the anti-slavery movement. People of this way of thinking and feeling do not usually make a deep analysis of the situation. As they do not fully understand the commercial evolution that is going on in the world, they are likely, in their opposition to the monopolistic action of trusts, to undervalue their productive power. The statutes which the people will favor, and will perhaps continue to enact, will be sweeping prohibitions, with plentiful penalties attached to them. They will be laws that cannot be enforced, and that would do harm if they were enforced. And yet, in a way, what this section of the people has to contribute toward the

raised prices nor depressed wages as they would have done if their mastery of the situation had been secure the people assumed toward them a more tolerant attitude. Since then views have become divergent and different classes of the people have developed unlike opinions. The so-called trusts have a few pronounced friends and many pronounced enemies, while in the background, and constituting the jury before which the case is to be tried, is the undecided majority of the people. By their acts the trusts are furnishing evidence and are revealing their real nature; and they must accept, in the end, the verdict which the public will pronounce. The nation will have its way when it knows what it wants.

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solution of the trust problem is worth more than is anything which other sections can contribute. A zeal that is not according to knowledge now will be pretty certain to be according to it before the struggle is over. It will, at least, begin to do something; and if what it does proves to be not the right thing, it will do something else. In the end it will solve the problem; while, on the other hand, a knowledge that is not backed by zeal will do nothing either at the outset or afterward.

Fortunately, not all of the zeal is confined to the South and the West. Agriculture develops the most powerful opposition to trusts; but all through the country capital that is not massed in colossal holdings is opposed to them. The country as a whole has little use for real monopoly, or for political parties that entangle themselves with monopolies. Success in elections is to be had only under the old banner of economic freedom.

There are two small classes of people who are predisposed to favor trusts, even though they shall prove to be real monopolies. These are, first, the revolutionary classes — socialists,

anarchists, communists and the like; and, secondly, the workmen in a few highly organized trades, who have some inclination to favor those trusts which will exact high prices from the purchasing public and share with their workmen the gains thus realized. Experience seems to show that a trust which has real monopolistic power may form an alliance with its workmen, or with important classes of its workmen, against the public. In that case the laborers who benefit by the high prices thus secured are attached to the trust, though it is by a conditional and precarious interest.

What is the attitude of the great body of the people? Has it not taken any decided attitude? Does it not know what it thinks and wishes? In so far as the details of law making are concerned, it certainly does not. It is in the inquirer's position; and the question that it is hoping to have answered is whether it should try to frame statutes that will crush the trusts or should content itself with trying to regulate them, or even with letting them alone. On the more fundamental issue, as I venture to affirm, the mind of the people is made up. There is

one thing that it wants and will have; and there is another thing that it fears, hates and will repress. What it wants is productive efficiency. The people will have capital so organized that it can compete successfully with any capital in the world. What they will not have is capital so endowed with special and abnormal powers that it can do a plundering work, as well as a productive one.

There are certain distinctions which the people almost never make with sufficient clearness; and these they must at some time make, if their moral earnestness is, in a practical way, to be good for much. There are three things, not at all identical, which the people, in their thought and speech, jumble together, and even attack without any discrimination. They are, first, capital as such; secondly, centralization; and, thirdly, monopoly. When a general attack is pending, the word that is used to cover them all, in blanket fashion, is "monopoly." Whenever the anti-monopoly movement takes the shape of an assault on all bondholders or stockholders, it is clear that the first discrimination has not been made; for thus capital, as such, is

confounded with capital endowed with pernicious powers.

This, fortunately, was not the attitude of those representatives of the people who were recently gathered at the Chicago conference, and it is not the attitude of the people in general. There are persons who have a quarrel with bondholders and stockholders, as such, because they are opposed to the men who have something. They are, however, in a very small minority. It is only in the heat of a contest that an attack of monopoly becomes, to any important extent, an actual attack on capital.

An attack on monopoly easily becomes an attack on centralization. In this connection clear discrimination is rare. To many people the massing of capital seems necessarily to make it monopolistic. If it does this, then there is no distinction in fact between highly centralized capital and monopoly. We cannot have capital in very big masses without being "in the grip of an octopus" or "enslaved," as some of our friends from the West and South think that we already are.

There is one great question of fact pending:

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There is one great question of fact pending:

Does centralization carried to great lengths necessarily involve monopoly? If so, those people are perfectly right who jumble the two together and attack them both with all the energy of which they are capable. Monopoly is unendurable. If we cannot exterminate it or reduce it to harmless dimensions, we shall begin even to listen to the seductions of the socialists. We shall think better than we ever thought before of the plan of letting the trusts do their utmost, to the end that, as soon as a vast network of them shall have full possession of the industrial field, we shall seize their entire capital and use it for the benefit of the people.

Is this the only alternative? It is so if centralization and monopoly are practically the same thing, and if the centralizing tendency cannot be stopped. If they are not the same, then we may have centralization without having monopoly. We may get the good that there is in the trust and cast away the evil. We may save all the productive energy that vast capitals ensure, and make ourselves victorious competitors in the struggle for the traffic of the world. We may enable ourselves to

undersell every one else, not because our workmen will take low wages, but because, thanks to our big shops and our automatic machines, they produce more than any other workmen. If America is, as it seems to be, the natural home of the trust, and if we can draw the fangs of the monster and tame him to good uses, we can get all that it is possible to get out of material civilization. We can be commercially dominant and the leaders in economic progress. We can win the prizes that leadership brings—and there is no measuring the value of those prizes; for wealth honestly gained and honestly dispersed among the people means a high level of life, intellectual and moral, as well as physical.

Momentous beyond the power of language to measure is the question whether centralization may be allowed to go to the utmost lengths without fastening on the people the intolerable burden of monopoly. Answer this question in one way, and you will probably be a socialist; and certainly you ought to be one. Answer it in another way, and you will be an "individualist," though that is an inexact term for indicating the development for which you hope. In the

latter case, you will believe in freedom of individual action, in competition, in the right of contract—in short, in the things that have made our civilization what it is. In either case, you will keep your optimism; for you will be sure that, in the end, we shall get out of our troubles and dangers. But if you think that the only thing that can save us is the seizing of all capital by the state, then the economic millennium, the vision of which will cheer you in the dark days before it can be realized, will be a time of fraternal sharing of everything, of the keeping of a common purse for humanity and of a forced equality that will leave little chance for liberty. If, on the other hand, you think that competition and private initiative can save us, if only they have a fair trial, what you will see before you is an endless era of progress insured by old and familiar forces. You will see the wealth-creating power of the social organism always growing, wages always rising, wealth often massed, indeed, in great corporate capitals, but also divided, in its ownership, into a myriad of holdings scattered widely among the people. You will see workers acquiring capital,

while still earning wages in the mill; and, as an outcome not so remote as a Philistine view would make it, you may see production moving so steadily that the bonds of great corporations, and even the stocks, may become common and safe forms of investment of workmen's savings. You will see them used so freely for this purpose that the old and sharp line of demarcation between the capitalist class and the laboring class will be blurred and at many points obliterated. The men who work will have a proprietary interest in the tools of labor and a share in what the tools produce. The socialist is not the only man who can have beatific visions, for the picture of a manly development for the laborer — of a perpetual rise in wages and increase in savings, in home owning, in personal independence, and in culture — is presented to every one who sees what competition is capable of doing. Not, indeed, without very intelligent action on the part of the government, and not without experimenting and waiting, will all this come. But it will come ultimately, provided only that, in spite of consolidations, competition shall continue to work.

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The practical thing to be decided, therefore, is what a state can do to open the rift between centralization and monopoly—to enable the mills to produce and to sell as cheaply as the biggest establishments can, but to stop the extortion that trusts practise and ward off the greater extortion that they threaten to practice.

What is the kind of legislation that a government needs to enact, if it will pluck the flower of commercial success from a very thorny and dangerous bush? The key to the solution of this problem is afforded by the natural forces that are already curbing the great corporations. We have only to act according to nature. We must do what a skilful physician does when he wishes his patient to get well: we must remove the obstructions that prevent nature from doing its healing work. Great corporations would never be monopolies if competition were not abnormally fettered—if individual action had a fair field and no favor.

Certain fundamental facts are now well known, and we encounter them everywhere in

the discussion of the problem of trusts. When prices are unduly high, owing to the grasping policy of some trust, what happens? New competition usually appears in the field. Capital is seeking outlets, but it has become hard to find them. Readily, and sometimes almost recklessly, does it build new mills and begins to compete with trusts, when these consolidated companies do not know enough to proceed on a conservative plan. Let any combination of producers raise the prices beyond a certain limit, and it will encounter this difficulty. The new mills that will spring into existence will break down prices; and the fear of these new mills, without their actual coming, is often enough to keep prices from rising to an extortionate height. The mill that has never been built is already a power in the market; for if it surely will be built under certain conditions, the effect of this certainty is to keep prices down.

The real and serious difficulty is the fact that the curbing influence of this latent competition cannot always be depended on to prevent a real and considerable extortion.

There is often a considerable range within which trusts can raise prices without calling potential competition into positive activity. The possible competitor does not, by any means, become a real one as promptly as he should. The trouble is, that he has not a fair chance for his life when he actually appears on the scene. He is in very great danger of being crushed by the trust, by virtue of certain abnormal things that the trust is now allowed to do. If the great company could not do these abnormal things, the new competitor would be safe, and he would appear promptly whenever profits should become high enough to call for him. The possibility of his coming would hold prices at a natural level. The trust would benefit the people by its economies and would not trouble them by its exactions.

Potential competition is certainly a real force. Experience has proved this a hundred times, in the short period within which modern trusts have existed. It is, however, a force that can be easily obstructed. Capital is proverbially timid; yet here is a case where it

has to be bold, if it is to do what the public needs to have it do. Our system of laws now permits overgrown capitals to bully small ones. The big company has a right to beat the little one in an honest race for cheapness in making and selling goods; but it has no right to foul its competitor and disable it by an underhanded blow—and this is exactly what great trusts are doing. Where a state needs to secure delicate action by a highly sensitive agent, its clumsy laws and clumsier policing allow that agent to receive rough handling when it comes into the field or to be so terrorized in advance that it often does not come at all.

The fact is that a trust is allowed to do things which are out of harmony with the spirit of the law—things which it could not do if the law were accomplishing even the single task that a narrow Spencerian policy demands of it, namely, the protection of property. There are actions that have in them the essence of robbery, though they lie altogether outside of the scope of statutes heretofore enacted. It is not so clear that they are outside of the scope

of common law; but they are not actually suppressed by it. We shall see what these actions are and what policy they call for. We shall see how, by preventing such acts, we can make the trust legitimate and safely avail ourselves of its vast productive power. We can use insight and perceive how nature is already working. We can try the right experiment, and try it early. We can liberate the competitive forces that, even now, trammelled as they are, make our state a tolerable one, and enable them to develop their full influence. The monsters that alarm us are tied by a half visible leash that we did not consciously put on them; but it is one that we can strengthen to the point at which it will hold and tame them, making them serve us. Success in the fierce rivalries into which nations are now entering will come to those which utilize, for all that it is worth, the power which massed capital gives, without surrendering their economic freedom.

CHAPTER II

EARLY EXPERIMENTS AND RECENT FACTS

THIS country is the especial home of trusts in their highly developed form, — that, namely, of the great corporation which has absorbed many smaller ones; and here, therefore, has been experienced, in the largest degree, the revolutionary changes which their presence is making. If the carboniferous age were to return and the earth were to repeople itself with dinosaurs, the change that would be made in animal life would scarcely seem greater than that which has been made in business life by these monster-like corporations. Their size is, however, one of the few things about them of which we can be absolutely sure. Whether in the long run they will prove to be benevolent or malevolent we cannot know more positively than we can know whether the extinct saurians were gentle or fierce. In both cases the looks imply a degree of fierceness. But

we do not know definitely whether the trusts will permanently raise prices or lower them, or whether they will permanently lower wages or raise them. We do not know whether they will in the end impair investments or make them more secure. It is a singular fact that, in the face of all of these uncertainties about the character of trusts, there is one type of law which the people of many states have been able to agree upon, and that is the kind of law that aims to crush them. We propose to exterminate the monsters on uncertainties. The Montana verdict, that a man deserved hanging for shooting another by accident, inasmuch as "in such matters a man should know his own mind," seems to be applicable here; for a country should know its own mind before destroying an institution.

More general than the opinion that the trusts ought to be crushed is the conviction that they will not down. They are here to stay, and we know it. An explanation of the light-hearted way in which we put upon the statute books laws that aim to crush them is found in the fact that such laws do

their principal work before they are enacted, when they are nothing but planks in political platforms. In the present temper of the public mind severe measures are at least good for the party that promises them; and, if by an experiment or two it is shown that they are not workable, there is the less danger in continuing to enact them into laws. In general, political platforms have of late required prohibitive statutes, with pains and penalties attached to them; and, though such statutes have frequently been enacted, so far as large results are concerned, that has been the end of it.

Unless we can "fool all of the people all the time," we shall be forced sooner or later to change this policy; for the people will have laws that not only sound well, but work well. In order to obtain them, the first step is to get a more thorough knowledge of the facts concerning trusts and their operations. We certainly need to know more than that in its outward appearance, a trust resembles an octopus.

Not baseless, certainly, are the accusations that are universally brought against the trusts

for their conduct toward their competitors. Often enough is their policy predatory. They do not literally kill men, but to a large extent they do kill competition. They often make property in the shape of rival plants very insecure. Indeed, one of the pressing questions is, whether the independent producers who have been crowded out of the field are unfortunate sufferers from natural progress, or whether they are the victims of a wrong against which society should protect them. Mere centralization means a crushing out of competitors by a process that, however hard it is for them, is in a way legitimate; for it is an incident of the process of the survival of the fittest. The large and economical establishment survives, and society gets a benefit from the fact. But centralization that goes to the length of quasi-monopoly takes a different color, for it may exterminate competitors in ways that do not benefit society. The employers who are forced out of the field are not then vicariously sacrificed for the good of the public as a whole. On the contrary, the sacrifice of them works exceedingly ill

for the public; and it must be stopped, if society is to avoid graver evils than have recently come upon it from any economic cause.

How much power does great size give to one of these corporations? Can it, if it will, have the market practically to itself? Can it charge what it will for its goods? Can it shut up as many of its own mills and discharge as many of its own laborers as it pleases? Is there anything to prevent it from acting as a genuine monopoly? If there is not, the situation will soon be intolerable, so that no treatment to which the state may be forced to resort, in order to rid itself of the trust, will be unjustifiable.

I

There are two important facts to be noted before we can conclude that the trusts actually have, in a dangerous degree, the power of monopoly. "The first is a weakness in the organization of the trusts themselves, and the second is the existence of a powerful restraining force in their environment. Both of these serve to curtail their monopolistic power. It

might seem that, if this is so, the internal weakness of the trust ought to be fostered by the public for its own protection. May we not say that whatever weakens our enemy strengthens us? Should not a policy that would make the trust a more perfect thing, in its internal arrangements, be the last one to be adopted? Curiously enough, this is not the case. We can even help to protect the public by insuring to the trust a sounder organization. Although, as competitors, trusts are now somewhat handicapped by internal weakness, there is a method of removing that weakness which will not imperil the interests of the public, but will contribute in a certain positive way toward protecting them.

1. It should not be overlooked that at present the trust is a very imperfect thing. It is composed of a body of stockholders, a few of whom are promoters and directors. Theoretically all of its proceedings are for the benefit of the stockholders. If this were really the fact, the great issue would lie between the trust, as a whole, and the public. As it is, however, there is a more immediate

and pressing issue between the manipulators and the shareholders. The investor is at present the most conspicuous of the trusts' victims; and measures for the protection of the honest and innocent investor, whose money is filched out of safe places into these perilous ones, stand first in the order of time and of immediate importance. It fortunately happens that the very things which will protect the shareholder will injure neither the body of consumers nor the excluded laborers, but will contribute toward the protection of both of these classes. There is, therefore, complete harmony between the policy that stands guard over honest capital which is lured into a position of danger and the policy that protects the public from extortionate prices and workmen from enforced idleness.

The condition of an overgrown trust often resembles that of the wolf in the Russian story. As the members of a pack were shot, one at a time, by the occupants of the sleigh that they were pursuing, each victim was devoured by his comrades; and when the number was reduced to one, this survivor

had virtually eaten his thirty-nine mates. It was then seen that he wobbled somewhat in his gait and no longer kept up with the sleigh. A trust that, as the saying goes, has "swallowed" thirty-nine competitors cannot, in the nature of the case, be in an altogether healthy condition, for its power of digestion and assimilation is not unlimited. Very often the management of such a trust is inferior to that of the corporations which were absorbed by it. The promoter's purpose is attained when, having merely formed the corporation, he gets his slice of the stock and realizes on it in the market. He may have neither the energy nor the skill that is required for managing the consolidated company. He forms the combination and leaves it to its own devices — and often they are bad ones.

If this were all that the stockholder had to fear, his case would be better than it is; but unhappily a management that is bad for business may be good for speculative purposes. When profit cannot be secured by making goods and selling them, it may often be gained by "milking" the market for the stock or by

wrecking the corporation. What the investor needs before all things is security. He wants to have the trust make money by producing goods and selling them for more than they cost. But the manipulator often wants something so distinct from this as to draw a sharp line between his interests and all legitimate interests. It follows, therefore, that the first thing to be done for the benefit of all parties interested is to clear out a mass of iniquity within the organization; and the means that promises to be most efficient for this end is publicity. When there are so many persons demanding the application of this principle and so few opposing it, there is little doubt that it will be practicable to get it. The trusts must stand the turning of light upon their internal affairs. The public must know what plants they own, what they gave for them, what they are worth at present, for how much they can be duplicated, what appliances they contain, whether antiquated or modern—in short, what is the substantial basis for the value of the stocks and bonds that are placed on the market. This knowl-

edge is at present inaccessible. The investor who puts money into the trust must guess as best he can what property he is getting, and the guess is apt to be a bad one for him. The making public of such business facts as have just been specified would remove the gravest evils from stock watering. If the investor could know that there was only one dollar of property back of five dollars of stocks and bonds, he could buy the securities at a discount from par that would make him safe.

2. In the minds of the great mass of the people, however, the innocent investor is not the chief subject of thought or care. What the public chiefly wishes to know is whether the trusts are to possess and use monopolistic powers. Can they make goods dear at pleasure? Can they turn off bodies of workmen and make it hard for them to get new places? If they are genuine monopolies, they can do these things; but if much competition survives, they cannot.

As has been said, it is coming to be generally known that what it is the fashion to call "potential competition" has for a decade or

two protected the public against really monopolistic extortions. If the trusts charge too much for their products, new mills are built and prices go down. Many early trusts did this, with the result that new mills were built. These facts have served as object lessons for the managers of trusts. While they have to some extent put up prices, they have usually kept them below the level at which new competitors would be called into the field.

It is commonly supposed that mere size gives corporations a competing advantage, but this is an inaccurate supposition. A concern with a capital of twenty million dollars cannot lose a million a year any more safely than one with a capital of twenty thousand dollars can lose a thousand a year. If the losses that a corporation sustains by cut-throat competition are in proportion to the amount of its capital, it is not necessarily a dangerous competitor. As a practical fact, a new mill, equipped with the newest and best machinery, is often a stronger competitor than a trust which is encumbered with antiquated plants. In so far as a legitimate rivalry in

cheap production is concerned, it is safe enough to build a new mill and try to get a share of patronage for it. Wholly intolerable would be our present condition, if this were not the case. As it is, we are not greatly conscious of being under an oppressive power. We can therefore look at the situation with calmness and, before deciding upon a permanent policy with regard to trusts, we can take time for deliberation. All this is due to the fact that potential competition is working powerfully to protect us. It is not an influence of our own devising; it has set itself at work with no thought on our part; but it accomplishes indefinitely more than statutes have ever done. If it worked in perfection, there would be no need, in this connection, of our doing anything. We might protect the investor and go no further.

There is very much to be said in favor of a system in which competition of the old type shall have ceased. One can picture to himself the world as no longer filled with actual competitors engaged in an overt struggle with each other. One can imagine a department

of business no longer represented by a hundred mills of one kind, working independently of each other and struggling desperately for patronage. One can imagine a condition in which it would not be necessary for rival producers to pull bewildered purchasers this way and that by the eloquence of travelling salesmen, by the enticing statements of newspaper advertisements, and by the allurements that are offered by combined art and eloquence, as these are condensed into the peculiar decorations with which American roadways are supplied. A nearly ideal condition would be that in which, in every department of industry, there should be one great corporation, working without friction and with enormous economy, *and compelled to give to the public the full benefit of that economy.* This last is the crucial point; for it looks far easier to secure the monopoly of the field, and even a large part of the economy that this ought to insure, than to secure the making over to the public of the benefits that accrue.

It happens, fortunately, that the degree of publicity which will protect the investor will also afford a certain help in protecting the

consumer. Among the things that the public must know is the earning capacity of the plants that the trust owns. If this is large, the inducement for capital to enter the same field is proportionately large. It is clear, however, that such publicity is far from accomplishing all that the public wishes to have accomplished. It is conceivable that the investor may be made safe, while the competitor may be sacrificed, so that the consumer and the laborer may then find their interests in great danger; and the more difficult problem for the people to solve is the one which they have all along been trying to solve—that of protecting these latter classes.

II

The principle of monopoly itself is not perilous for that investor whose capital is in the monopoly, but it is intolerable for every one else. It is safe to say that our people will ultimately find or make a way to destroy any genuine monopolistic power that is in private hands; and it is nearly safe to say that, if we

do nothing beyond protecting the investor, the trusts will acquire too much of this power and will become less and less endurable. The restrictions that now hold them in check are not likely of themselves to grow more effective hereafter, while the trusts are likely to grow much stronger. Monopoly power that is increasing and restrictions that are diminishing in force point to a time when something positive will certainly have to be done in defence of property rights, if not of personal liberty. The measures that it is possible to take are not many, but we shall soon see what they are and try to make a selection from among them. Even now we can discern the principle which must dominate a sound policy in dealing with trusts. That principle is, first of all, to keep competition alive. Proper regulation will not shield an independent producer from any legitimate rivalry, though it will protect him from what is not real rivalry, but a disabling policy on the part of the big competitor.

Many a trust would now find itself in a new and strange position, if it had no power to keep down rivals save by fair competition;

and recent experience seems to show that, up to the present time, goods are often produced with greatest economy, not in shops that are owned by the trusts, but in those which are owned by alert and enterprising competitors. If such producers are liable to be crushed, in spite of the economy with which they work, the public will suffer an injury that is far more serious than any which the trusts have thus far brought about. If it shall be established that economy of production, or legitimate competing power, affords no protection to an independent producer, a blight will be put upon the progress of inventions; for monopoly itself does not greatly encourage invention, and the would-be competitor of the monopoly, who would gladly introduce economical devices, will find the effort to enter the field at all very perilous. The brilliant series of industrial improvements that have been steadily raising the level of human life and have opened an inspiring vista to those who look into the future may not thus be brought wholly to an end, but it will continue under serious difficulties and with comparatively small results.

The power of trusts to crush competitors is dependent upon three kinds of unfair dealing. The first is local discrimination in prices. The trust may sell goods for less than cost in a limited section of the country, where an independent producer is operating, while it sustains itself by charging high prices in the large remaining area. Even though the competitor may greatly excel the trust in the economy with which he makes goods, he may be forced out of the business by this predatory policy. A producer, who found himself in this position, once called on the manager of the trust that was driving him to the wall and was received with a brusque admonition that he had "better get out of the business." "But do you not see," said the independent producer, "that, in my territory, I can produce more cheaply than you can?" "Do you not see," was the reply, "that, if we lose money in the twenty cities where you are operating, and make money in the two hundred other cities where we are operating, we come out ahead?" Such local discrimination is a strategic measure that is often irresistible.

Again, discriminations may be made, not between different localities, but between different grades of goods on the general price scale. The trust may make many varieties of one general kind of merchandise, while the competitor may make only one. In that case, even though he may operate in many sections of the country, the trust may pursue and destroy him. It may reduce the price of his type of goods below cost, while keeping all other prices at the original high level.

Thirdly, the trust may refuse to sell goods at all under certain conditions. It may boycott merchants who do not comply with its regulations; and one of its requirements may be that the merchants in turn shall boycott all independent producers. This is the basis of the "factors' agreement," whereby a trust which, within the wide variety of its products, has a number of things that are essential for a merchant's business, either refuses to sell him anything or refuses to give him necessary discounts, if the merchant buys goods of any description from a competing establishment.

Can these three practices be suppressed by

law? Off-hand answers to this question are often in the negative; and certainly there is no blinking the difficulty of this undertaking. If a law could be made and enforced, compelling the trusts to treat all customers alike, local discriminations would, of course, have to end; but the enforcement of such a requirement would encounter difficulties. The most obvious of these arises from the fact that merchandise is not, like refined gold, of uniform quality and readily cognizable. Hence, the trust might manufacture a certain grade of goods and offer it solely in one state, for the purpose of crushing out competition showing itself there. It would thus be possible to claim that it was making no discrimination in charges, since whatever was offered elsewhere was offered at the same price in this state also. But as soon as the vital necessity for keeping home competition alive, in spite of consolidations, is fully appreciated by the public, it will be practicable to secure serious consideration of a plan of action which, if it were successful, would accomplish this.

CHAPTER III

HOW NOT TO DEAL WITH TRUSTS

OF the measures which it is possible to take in connection with trusts, some have only to be stated to be rejected; and these it is not worth while to discuss. Other measures, however, do not carry their condemnation on their face. Each of these has some support from reasonable people; and within this list of expedients it is well to apply, if we can, a rule of exclusion. Even of these, some will almost certainly not be adopted, and by eliminating them we can save our thought and effort for policies that have more in their favor.

At the risk of disagreeing with many persons for whose general views I have sympathy, I venture to say that one of the things we shall not do is to make a sweeping abolition of protective duties. It would be necessary to remove these duties in a wholesale way in

order fully to accomplish the purposes of the measure. To expose a few trusts to the full force of foreign competition and to continue to protect others would be so far from a solution of the problem that the gain which could thus be made would scarcely be worth much risk and trouble. Totally to abolish very many duties would seem to the people like taking a hazardous leap into a gulf of uncertainties. And then, if it should turn out that some of the duties sustained not merely the trusts, but the industries themselves—if, after the abolition of the duties, the making of many articles were to become comparatively unprofitable, a very costly reconstruction of our system of industry would have to be made. Whatever may be said about the wisdom of having tariffs at all, a country which actually has one and which under it has built up industries that are still in some degree dependent on it will be cautious in abolishing it.

This, however, is far from denying that large changes in our system of import duties are practicable and desirable. The question is: On what principle shall the changes be made?

Undoubtedly we shall modify our tariff, to make it less irrationally protective. We shall become weary of paying more for our manufactured products than Europeans pay for them. The trusts themselves will wish to enter foreign markets that are now closed by retaliatory duties, and they will look with favor on reciprocity treaties. They will find that, in the main, exports are paid for by imports; and that where importations are now cut off by the American tariff, exportations are limited to small dimensions. We cannot, of course, send away our goods forever in exchange for securities. If we sell goods, we must buy goods; and this fact may mean the lopping off now of one and now of another feature of the protective system.

There is a scientific way of dealing with import duties; and we cannot expect to find it and adopt it unless we make sure, at the outset, of the true relation of the tariff to the problem of monopoly. Duties do something for the trust that exists within an industry; but they also do something for the independent producers who, with the trust, constitute the

industrial group as a whole. They likewise affect the potential producer, or the man who is not now in the field but will be there if certain inducements are offered. The solution of the tariff problem is bound up with the true solution of the problem of dealing with monopolistic corporations.

The essential principles in this connection may be stated as follows:—

1. Wherever there is a trust, there is an independent producer also to be considered. If he is not now in the field, he stands ready to enter it when a return is to be had.

2. This independent producer should at all hazards be protected, not against any fair competition, but against unfair and predatory attacks by his powerful rival.

3. If he is thus protected, his presence or even a contingent prospect of his arrival on the scene protects the public against extortion.

4. When the public is thus protected in a way that is not dependent on changes in the tariff, this fact makes it practicable to make such changes in the wisest way.

5. The alterations that, under these con-

ditions are desirable are unlike those which would be made if the purpose in view were merely the crippling of the monopoly. They are more nearly like those which might well be made if there were no trusts in existence.

6. If competition is thus kept alive, the trust can afford to permit a reduction of the duties on its own products, and it is interested in demanding reductions of the duties on many other things.

7. If such reductions were made, the trust would find itself less strongly impelled than it now is to act a predatory part in crushing its independent rivals.

The truth of these propositions will appear as the argument proceeds. What they signify is that it is of vital importance to keep competition alive, if we are to deal in a right way with our protective system, and that proper regulation of protection will, in turn, help us to keep competition alive. In other words, if we solve the problem of monopoly without changing the tariff, we shall get help from the trusts themselves when we seek to make changes. These changes will then have a further and

advantageous reaction, which will confirm and increase the gain that we shall have secured by our original anti-monopoly action. Control the trusts, then, and take the monopolistic element out of them. This will help you to reform the tariff, and this, in turn, will make the control of the trusts more easy and complete.

What, now, are the essential facts? The country is full of great corporations which have some genuinely monopolistic power. They are sheltered by a tariff that enables them to put on American consumers the "fixed charges" of their business, and thus to sell goods to foreigners more cheaply than they sell them at home. These companies virtually collect from their customers in this country a subsidy for the maintenance of an export trade. Inevitably the demand is made that all duties which enable them to do this shall be repealed. If this demand were complied with, we should find ourselves without protection for a great variety of manufactured articles, but with protection for raw materials. The change would be a kind of tariff reform that would be most likely to injure, not merely the

trusts, as menacing powers within their several industries, but the industries themselves.

It would affect the independent producer as well as the trust; and it could be brought about only by a struggle of classes in which this independent producer, who is the natural friend and protector of the public, would be on the side of the combination and against the reformers. Success in the movement would mean that a crude force had overborne monopolist and free competitor alike.

Carry this struggle through to success. Abolish all duties on trust-made articles and see where that will leave the country. In a few cases you will produce no evil effects. Some branches of manufacturing have undoubtedly reached a stage in which it costs less to make goods in this country than in Europe; and in these industries, with no protection, the American makers can hold their markets against foreigners, while still getting fair returns. No foreign competition can force such producers to reduce prices to the profit-annihilating point. This, moreover, is the situation, not of exceptional and highly

avored manufacturers, but of the majority in some trades. Does any one suppose that the production of steel, for instance, would be much reduced, if that product were made duty free?

From this condition of fortunate independence industries shade off into a state of partial dependence on protective duties. In some branches the most efficient shops could hold their own against foreigners; while others, being less efficient, would have to yield the field to them. In very few cases would all the establishments be crushed; but in many cases there would be a great mortality among them. The shop that is now fighting its way toward success might find its career abruptly stopped. Possibilities of this kind are clearly enough before the public mind to prevent the abolition of all protection on all articles made by trusts. Wholesale removal of duties has some intelligent advocates, but it has practically no chance of success.

It would, however, be entirely reasonable to reduce each duty to an amount that equals the difference in cost between the American and

the foreign article. Find out accurately how much the owner of an American mill has to spend in the creating of a particular product, ascertain with the same accuracy how much the European spends for the same purpose, and make the duty on the completed article equal to the difference between the two sums. The European can then place his goods on the American market at an outlay which, when duties are paid, equals the outlay incurred by his American rival. The two will then be more nearly on an equal footing, and success will come to the one who improves his processes most rapidly and makes the largest savings in the advertising and selling of his wares. The public will get the benefit of this rivalry in economical production, and will get its goods at the maximum of cheapness. The adjustment will, moreover, favor the American maker; for, if the costs of production on the two sides of the Atlantic decline together, the *difference between the costs* will grow less. It will soon be smaller than the amount of the duty; and if then the goods are sold at their cost to one who imports them from abroad,

there will be a margin of gain for the man who makes them here.

Even at the beginning it is necessary to allow such a margin of profit to be made by every highly efficient producer. The costs in America and in Europe cannot be ascertained with perfect exactness; and if the duty is intended surely to cover the difference between them, it must be fixed at a slightly larger figure than the one that expresses the apparent difference. Moreover, costs vary in different shops; and in practice the most economical one in this country would not be made to furnish the standard for comparison. To do that might sacrifice a less efficient man. But if this latter producer is hopelessly outdone in the race for cheapness, he should be thus sacrificed, since in the end he is certain to fail. It is far from being for the public good to tax consumers for the support of an establishment that will run forever in a wasteful way. The only establishment that is entitled to consideration is the one which has before it the prospect of increasing success, but has not yet attained it) — the one which is well equipped,

but has not, as yet, won a market for its goods. Possibly its internal organization is tentative and imperfect, but has large possibilities of improvement. Many a new establishment goes through a period in which experimenting is inevitable and is costly; and that potential producer, to whom we have before referred as the agent whose possible action puts a curb on the exactions of the trust, has before him, whenever he plans to enter the field as an actual competitor, the prospect of facing such initial difficulties. An adjustment that takes the potential competitor into consideration will be apt to leave enough of the present duty on his product to cover the difference, not merely between the costs that he *will incur when his efficiency shall be fully developed* and those incurred by a European rival, but the difference between his earlier and slightly larger outlay and the European standard. On all accounts the calculation of the present excess of costs incurred by Americans over those incurred by foreigners needs to be made on a more or less liberal scale. Without retaining the absurd duties that now protect the American, a policy

which takes the situation as we now find it, and tries to change it in a reasonable way, will leave enough of the duty untouched to protect the establishments which are now running with a good degree of economy, though they fall short of attaining the maximum of it. This policy would be a desirable one, if there were no trusts in existence; and it may be even more desirable, in view of the growth of these monopolistic companies. *The chance of actually carrying out this policy depends on the regulating of trusts by a different set of measures.* We must take away their power to make, even under an exorbitant duty, any exorbitant profits. •When that is done, they may submit to a large reduction of duties on their own goods; and they will be morally sure to join us in demanding reductions of duties on products which they do not make.

After a long period, during which very little tariff reform of any kind has been obtainable, we find ourselves where two contrasted types of it present themselves as possibilities. There is, first, the abolition of the duties on finished goods and the retention of those on raw

materials. This is simply an anti-monopoly measure, which takes grave risks for the sake of curbing the power of great corporations. There is, again, the policy of reciprocity, which admits, with low duties or none at all, many products of foreign countries, for the sake of making markets for our own exportable goods. This plan might help the very industries within which trusts have been formed. It would certainly insure a sound commercial expansion. Will the trusts themselves favor it? Will the general public do so? If monopolies can be curbed without changes in the tariff, the answer to both of these questions is, Yes; if not, the answer in both cases is, No.

If a corporation can exact a really monopolistic price for goods that it sells at home, it may, however, treat its export business as of secondary consequence. It may prefer to accept reduced orders from abroad, rather than accept lower prices for the goods sold at home. There may be larger gains to be had from high prices in the home trade than from any practicable expansion of the volume of the foreign trade. The trust will then oppose any

reduction of the duties that enable it to maintain the unnaturally high prices.

What will it do if, in ways that are independent of the tariff, its monopolistic power is broken? If competition still acts at home and brings prices to their normal level, will the motive for fighting against the reduction of duties still exist? On the contrary, a sound policy will favor a reduction of them. The monopoly profits on the sales made at home will be definitely lost, and the foreign markets will then become of great importance. A policy that will gain admission to them for the goods that are coming in such abundance from our own mills will be lucrative.* Gains will come from large sales at natural prices, rather than from small sales at unnatural ones. This means that the trusts will be enlisted on the side of commercial reciprocity, and will tolerate a reduction of duties on such products as they make themselves, if foreigners will make similar concessions and if the American producers of raw materials will do likewise. Our manufacturers may not wish to meet foreign competition; but this does not prove that under favorable condi-

tions they cannot do it, even without protection. They can certainly do it with the aid of the limited protection that has been described above; and this certainty is made doubly sure by the advent of new and vigorous rivals at home. Inventions will be made and organization will be perfected, till the foreigner can be safely met on his own territory. With the prices of their own goods reduced by competition to a natural level, they can hold the home market in spite of all comers. Low duties on raw materials and efficient competition in our own country will afford advantageous conditions.

Among the possibilities of the near future is a status in which trusts shall be displaced from their vantage ground of monopoly and the prices of their goods shall be brought to a natural level. They will then be safe against foreign rivalry and anxious for foreign outlets. They will desire reductions of duties, if only these can be made in the case of raw materials as well as in that of finished products. So long as the trusts continue to be quasi-monopolies, they may contest every foot of progress

toward freer trade; but if they lose the monopolistic position, they will use their vast power in promoting it.

Of the utmost importance, then, is the rescuing of competition from extinction; for not only does this afford the key to success in solving problems of commercial expansion, but it creates the conditions for healthy progress in all the practical arts. Inventions will follow each other in bewildering succession, forces of nature will be pressed into service in enlarging measure and the earning power of labor will go steadily upward, provided only that an effective competition shall be kept alive. On the farmers, in particular, does the pressure of a monopolistic power, when it exists at all, rest heavily, and the rescuing of competition in manufactures means an emancipating of agriculture.

Before describing more fully the conditions under which a settlement of the tariff problem and of the trust problem is possible, we may dispose in a few words of some remaining plans for the control of trusts.

We shall not depend on limiting the size of corporations. We shall not prescribe a certain

number of millions of dollars as the greatest amount of capital that a corporation can have. If we were to do such a thing, we should have to do it in a way that would make no impression upon any but the largest trusts. Ten million dollars in actual capital would be sufficient for a majority of trusts, but it would be an absurdly small amount for some of them; and no legislator would think of prescribing a limit that would cripple important industries.

Moreover, we shall not try systematically to break up the great corporations into small ones. It is conceivable that a statute might be enacted which should say that any corporation producing more than a quarter of the supply of goods of a given kind should be treated as a monopoly and outlawed under a principle of common law that is already in force. If such a statute were effective to the extent of putting four smaller corporations in the place of one great one, we should still have to deal with the underhand pooling operations which go on now in many places. The four corporations would inevitably find ways of acting in concert.

Again, we shall not prescribe by law the prices at which goods must be sold. The difficulties encountered by such a policy are so obvious that it is scarcely necessary to mention them. It would require commissions containing many members, all wise and incorruptible. It would require superhuman skill in devising and applying a scientific rule for adjusting prices. Granting that commissions having such impossible qualities could be secured and that their action could be made effective, the result would have to resolve itself into a regulation of profits. The only basis on which prices could be prescribed would be one of cost. We should wish to leave to the producer a return that would pay fair wages, managers' salaries, interest on capital and insurance against risks. We should make the price, in short, cover costs of production, as liberally and scientifically interpreted. Competition, however, itself tends to make prices conform to this standard. It tends continually to rule out of existence certain net profits which are in excess of costs. Law, moreover, is a poor instrument for

accomplishing such a result. If it worked quickly and remorselessly in forcing prices down to the cost level, it would do more harm than the trusts have done.

Further, we shall not tax profits out of existence. We shall not enact that all gains above five or six per cent on the amount of capital used shall be made over to the state. That would stop progress. Why should a man improve his methods or deprive himself of any sleep in the effort to organize his establishment in an effective manner, if the most he can get in any case is a fixed gain of five or six per cent? It would be better to use the old machinery, to run the ill-located mill, to retain inefficient managers, etc. Inventors would find a poor market in a country where profits should be fixed by law.

Finally, we shall not try the experiment of state socialism. This proposition may require an extended argument, which cannot here be given. There is no doubt that the growth of trusts has caused state socialism to present itself to many a mind as a possible alternative for a régime of monopoly; and if it were the

only alternative, the case for it would be a strong one. As between a system of unregulated monopolies in private hands and one great public monopoly, many a man will prefer the latter. The situation, however, is not so serious. The trust is not now unregulated, and it is by no means incapable of further regulation. There are things now doing, and there are more to be done. There is in sight a condition in which these corporations may serve the public. They may give us the benefit of their efficiency. They may play their part in promoting commercial expansion and put this country into a position of peaceful dominance in the world's affairs. They may conceivably do this without oppression. They may not tax the consumer or crush wage-earners. The route to this desirable state is not easy, but I venture to assert that it is becoming reasonably plain. The solution of the trust problem is not as baffling as it has been.

CHAPTER IV

MONOPOLIES AND THE LAW

IN dealing with trusts it might be expected that theory would be bold and practice conservative. In fact, however, actual law-making has gone to the extreme of boldness, while theory has steadily held to the more moderate way. Practice is apparently about to take the latter course. The policy of the future is well in sight; and it involves changes in the present condition that are so moderate as almost to incur the suspicion of being a *laissez faire* course. And yet it is an effective policy for the regulation of trusts, and will do its work so well that it will stir up strong resistance, and therefore the execution of it will require all the energy which a people devoted to industrial freedom will be able to use.

In the making of new laws we shall do first what is most undeniably wise—that is, give protection to investors. When the public

is invited to buy stocks and bonds of industrial companies, it needs to know what real property it is getting by its purchases; and it will find a way to make the needed facts accessible.

When, however, the investor shall have been, if not protected, at least placed where he can protect himself, the graver difficulties connected with the regulation of trusts will begin. It is not for the harm that they do to the men who own them, even though these men may pay too much for the ownership, that monopolies are dreaded. It is for the harm that they threaten to do to the public. Consumers are in danger, and so are all laborers who are not specially aided at the cost of consumers. The trust may pay its own operatives well; but it may close mills and force many employees into other occupations. It is there that the injury to labor is located. There are, indeed, four parties who have a common interest in curbing monopolies: namely, the independent producer, the consumer, the farmer and the unprotected laborer. The rival producer may be crushed and the

consumer may be made to pay high prices for goods. The farmer, as a buyer of such goods, may be taxed on his consumption, and he may be made to take low prices for the raw materials that he has to sell. The laborer who is not tied in interest to the trust itself, by receiving a premium on ordinary wages, may suffer with the rest through a reduction of his pay. All this *may* happen; and it *will* happen to the extent that these consolidations acquire the amount of monopolistic power that it is for their interest to gain.

The key to the solution of the grave problems that are thus presented lies in the fact that the independent producer is the natural protector of all the other threatened interests. If the trust cannot crush him, it can neither tax consumers through high prices of finished goods nor mulct farmers through low prices of raw materials; and it cannot depress the general rate of pay for labor. Goods will be produced at normal prices, and all who help to make them will get normal returns, so long as competition is kept alive.

But it is not easy to keep competition in vigorous life. The great company has ways of clubbing the men who are bold enough to rival it. This is not done by the old and familiar plan of reducing costs and underbidding the inefficient producers. That is a part of the established order of things. The economic organism has become efficient as it is because capable producers have survived and others have perished. The process has, indeed, had its serious hardships. We have been appalled by the law that holds an inexorable fate over every employer who cannot get out of labor and capital as large a product as his rivals are getting; but for society as a whole there is gain coming from this. The hope of an endless increase of productive power—of a perpetual rise in the level of all economic life—lies in the continued action of this law of survival by which only the best servants of mankind are retained.

At present the situation is the reverse of this. The interests of the public itself are now threatened by the destruction of competing producers. This is because it is no

longer by reason of inferior efficiency that they are in danger of being crushed. It is not the unfit, but the particularly fit, that are in danger of going to the wall. The competing power that threatens to destroy them depends, not on economy in production, but on special and unfair fighting powers that great size gives. The really efficient producer, the man who can make goods even more cheaply than the trust can make them, is now in peril. It is this man who must at all hazards be kept in the field. We, the people, must use the law to protect him, as he uses his economic power to protect us.

Now, the first and easiest thing for us to do, in thus guarding our guardian, is to secure for him fair treatment by railroads. If the trust gets a rebate which he cannot get, it has him at its mercy. It may ruin him, even though he may be able to make goods more cheaply than the trust itself can make them. Moreover, it is the prohibition of pooling by the railroads themselves that subjects them to the temptation to make the discriminating charges. In a pool they would have no reason for trying

to lure away from each other the traffic of the large shippers. Yet the toleration of pooling means the regulation of freight charges by the state. It has lately come about that the attempt to preserve competition among common carriers has gone far toward extinguishing it among manufacturers. Competing railroads, a struggle for the business of large producers, secret rebates to such producers, the extinction of small rivals and an approach to monopoly in many branches of production—this is the series of phenomena that we have recently witnessed. Railroads in pools, regulated charges and a fair field for the small producers—this is the alternative series; and it is the one that in the end we shall choose unless we are driven to a much bolder course, the giving over of railroads to the government.

An exceptional functionary is the common carrier, and we shall be forced to deal with him as we shall not deal with others. His position is strategic, and we cannot long allow it to be used in a way that creates monopoly in the remainder of the economic field. Without pretending to deal adequately with the prob-

lems of transportation, I record the belief that the mode of solving them will not be through state ownership, but rather by state regulation. The type of regulation that we are now trying to enforce is more difficult than another one would be, and this other one would actually meet the exigencies of our position. We want all producers treated fairly; but we are trying to make the carriers treat them thus, while we keep the carriers themselves under a great temptation to deal unfairly. It is the competition of railroads with each other — the effort to lure traffic from one another — that affords the chief incentive for secret rebates to the larger shippers. Let the competition end itself by means of pools, and you put an end to this temptation; for then there is no longer anything to be made by giving such rebates. We must now protect the public against charges that in an all-around way may be too high; but we can probably do this more easily than under the present plan we can prevent discriminations. If all railroads were pooling their earnings, they would want to make their rates high and the public would want to keep them low. The

issue would be clearly drawn; and, though it might take a supreme effort to get the right law enacted and enforced, the evasion of the law would be less easy than is the evasion of a law requiring competing lines to treat all shippers alike. The law can protect the whole public against a generally high scale of charges more easily than it can protect a small shipper against special favors accorded to his powerful rival.

It may be taken for granted that the unequal treatment of different shippers is an evil so great that, sooner or later, it must and will be suppressed. When that is done, we shall find ourselves at the beginning of more serious work. There will remain in the hands of the trust weapons by means of which it can destroy its rivals; and these cannot so easily be taken away. If the solution of the railroad problem is hard, the solution of the remaining part of the problem of monopoly is still harder; but it is not beyond the power of the people, if that power be directed with intelligence.

There are, as we have seen, three ways, all now well known, in which a trust can crush an

efficient competitor. The rival may be producing goods cheaply, and he may be the man who normally ought to survive; and yet the trust may ruin him. It may make use of the "factors' agreement," by which it gives a special rebate to those merchants who handle only its own goods. It may resort, secondly, to the local cutting of prices, whereby the trust enters its rival's special territory and sells goods there below the cost of producing them, while sustaining itself by means of higher prices charged in other portions of its field. Again, the trust may depend on the cutting of the price of some one variety of goods which a rival producer makes, in order to ruin him, while it sustains itself by means of the high prices which it gets for goods of other kinds. These three things make the position of a competitor perilous. If the trust were prevented from resorting to them, competition, real or potential, would not only protect the public, but would insure to it a large share of the benefit that comes from economies in production. Independent mills would continue to be built and would be equipped with machinery so efficient that a trust would have

to be forever on the alert in keeping abreast with them. There is no conceivable condition in which both consumers and laborers would find their interests so well guarded as one in which trusts should be allowed to exist without let or hindrance, but in which the prices of their goods should be forced continually downward by the necessity for meeting actual or possible rivalry.

It is not difficult to see what is needed in order to make the independent competitors thus secure. In a fair contest for survival they can protect themselves. In such a struggle everything depends on mere efficiency in production, and they may well be subjected to the full force of it. When economy in production no longer saves them, it is time for the state to intervene; and it needs to do this, if it would carry out the very end for which it was originally established, — the protection of property itself, by the suppression of refined forms of robbery.

The factors' agreement, the local cut in prices and the illegitimate breaking of a general scale of prices must, then, in some way be stopped. If laws were self-executing, it would

be easy to stop them. These unfair acts could all be defined and forbidden; but not many laws are more difficult of enforcement than these would be. To forbid the factors' agreement is virtually to order the trust to sell goods of any kind to any customer who tenders payment for them; and the order might remain a dead letter. Prohibiting local discriminations in prices might have no better result.

You may, indeed, ordain, under severe penalties, that prices of a particular article shall be uniform to purchasers in every part of the United States. The costs of transportation should, of course, be taken into account, and the distant purchaser should pay a larger freight charge than the near one; but the price at the point of shipment should be uniform for both. A difficulty would at once arise from the fact that merchandise seldom has those qualities which, in connection with money, have been termed homogeneity and cognizability. The goods vary in quality, and it is not always possible for a purchaser to tell of what quality they are. If a trust wished to crush a competitor in Minnesota, by selling

within that state certain goods at less than it cost to make them, it could perhaps accomplish its purpose, in spite of such a law as is here suggested, by making a special type of goods and offering it exclusively in the market of Minnesota. It might create an entirely new brand of goods and offer it nowhere except in this one state; and there it might offer it at a price that no competitor could meet.

It would, indeed, be true that, under the supposed law, the trust would be obliged to sell goods of this special brand to consumers in other states at the same price at which it sold them in Minnesota; and if orders were to come promptly and freely from the other states, its attempt to ruin its competitors might prove costly and unsuccessful. Sooner or later the orders would doubtless come, and the strategy of the trust would no longer serve its purpose; but an independent producer might not hold out long enough to get the relief thus afforded. During an interval the trust would secure high prices in every state but one; and in that single state it could afford to stand a loss for the sake of ruining its competitor.

Even this difficulty is not as great as is that encountered in the effort to suppress the breaking of a scale of prices and the making of a ruinous rate on a single article that figures in the scale. The independent mill may be sending its goods all over the country, but it may make goods of only one kind. How shall we prevent the trust from temporarily selling at a ruinous rate goods of this one kind?

It is true, indeed, that this particular club, which would be very effective in braining a single small competitor, would be of no use against a combination of small producers making, in their various shops, as complete an assortment of goods as is made by the attacking trust itself. The cut on one article made by the big corporation could be met by a similar cut on that same article made in one of the shops controlled by the pool; and this affords a reason for thinking that the permanent policy of this country will not be hostile to such pools. In foreign countries they are treated with toleration, if not with friendliness; and for defensive purposes in wars against vast corporations they may have a function to perform here.

If it could be proved that a reduction in the price of some one type of goods was not justified by changes in the conditions of production, this would be an evidence that the cut was made for a predatory purpose. If the price of the particular grade of goods were first put down and then put up again, and if rivals were crushed in the interval, this would be evidence that the purpose of the cut was illegitimate. Sharp enough penalties for such conduct, enforced in a few cases, might make the policy too dangerous to be practised. It is not to be admitted that statutes for the suppression of wars of extermination, such as a trust can now wage against its rivals, are powerless. They are, to be sure, difficult of enforcement; but if the people were living always in a heroic mood and maintaining a fierce watchfulness over their officers, the thing desired would certainly be done, and it may be done in any case.

There is a better thing of be done. Statutes are not our sole reliance. The American lawyer may gauge his skill by his success in "driving a coach and four through them." Where statutes are the only reliance, technicalities are

in favor of the criminal, and lawyers secure immunity for him. The most efficient action that has thus far been taken in curbing the power of trusts has been taken under the common law. It forbids monopoly, and there is no possible danger that this prohibition will ever be abandoned. To tolerate a monopoly in private hands, is to vest in a few persons the power to tax the rest of the community; and this will never be permitted. The thing to be done is to discover what is a monopoly and to decide what shall be done with it where it is identified. At present there rests upon the courts the duty of determining in what cases a monopoly actually exists; and the determination has its difficulties. How shall a monopolistic corporation be defined? Is it the only corporation from which an article can be procured? If so, there are scarcely any such monopolies now in existence. In nearly every industry there is a fringe of independent life remaining. The trusts take the centre of the field and let a few small rivals operate on the outskirts. If these are in the trust's power and are compelled to do its bidding, the

monopoly is essentially complete. If, then, new and strong competitors are precluded from appearing, the position of the monopoly is secure; for it has nothing to fear on the economic side. Just here, therefore, its danger on the legal side ought to begin; for it is the banishing, not merely of the actual, but of the potential, competitor that makes it a monopoly. If the law will take it effectively in hand at the point where competition of the potential kind ceases to restrain it, nothing more is needed. Let us, then, enforce, the common law as it stands. What is to be desired is a recognition of potential competition as a regulator and of the means used to destroy its power, with a rigorous use of the legal force, wherever these means are employed.

There are some economic distinctions that will have to win recognition before the course of legal proceeding in the case of monopolies can be clear. To dominate weak rivals and to prevent strong ones from appearing, is to perform the act and to take on the character of a monopoly. But the large and efficient mill that has not yet been built is a regulator of prices

in advance of its existence. If the way is quite open for it to appear, the trust cannot long keep prices at a high level, and cannot put them there at all with safety for itself. The test of the question whether the great corporation is or is not a true monopoly is applied by determining whether the way is or is not open for the competitor to appear. If the new mill can be built without danger that the trust will close it by means of some of the illegitimate practices above described, the great corporation is a beneficent institution. It will produce goods economically, develop an expert business and accumulate capital in a degree that will go far toward giving to our country financial dominance in the world. If the rival mill is terrorized in advance and precluded from appearing, the trust has all the evil traits that the term "monopoly" implies. It is a monster in size, in either case; but the difference between being a docile servant of man and a predatory beast is made by a mere potentiality. Can the rival safely appear or can he not? is the test question in the case.

Size, then, does not make a monopoly. Con-

ceivably a corporation might make all the goods of a given class and yet be held completely in check by merely potential competitors. Practically, in some departments of industry, an approach to this condition now exists and makes the state of society a startling one, though still tolerable. The power for evil that goes with size may not be used. When it is used, the predatory work begins. Monopoly is that monopoly does; and the typical act that identifies the unlawful power is the crushing of rivals by the means above described.

Advancing rapidly is the time when to every highly developed state there will be presented a sharp practical alternative. It is between keeping alive the power of potential competition and not doing so; and this means a choice between putting its citizens actually into the power of the "octopus" of popular rhetoric and keeping them free. Nothing but competitive power of some kind can take from monster-like consolidations of capital their power to do evil, while leaving to them both their power to do good and a motive for exercising it. If it is certain that the competitor will

promptly materialize when he is needed, the trust is eminently useful; but as this certainty shades off into a bare probability, or even into an improbability, the evil qualities of the combination grow and the good ones gradually vanish. Size without predatory power, then, makes a corporation beneficent; but size with this evil endowment makes it a menace to freedom; and the power to work harm depends on the special practices that have been mentioned—namely, the favors exacted from railroads, which we assume will before long be stopped, the local cutting of prices of goods, the breaking of a scale of prices and the type of boycotting termed the “factors’ agreement,” which, as we claim, must be stopped. By these means the trust can often crush a rival; and *the prospect that it will resort to them often terrorizes the rival in advance and prevents him from appearing in the field.* The trust has but to brandish its clubs when the rival producer is taking his preliminary survey of the field. It will not need to use them, for the rival will vanish.

There are, then, at least two potentialities that have to be taken into account if the

present situation is to be understood and if a future policy is to be wisely determined. If new competition is sure to spring up in case prices are raised, they will not be raised. They will continue to be held down by a possible producing agent, and not by one that is actually present and acting. This is potentiality number one. It may be that the new competitor will not dare to appear, because the trust will use its clubs in case he does so. This is potentiality number two, which neutralizes the first one and leaves the monopoly unchecked. The certainty that a competitor will be ruined, if he appears, takes away all probability of his appearing; and this probability affords the only natural check of any importance on the action of the monopoly. What is wanted is a third potentiality, such as the law alone can afford. It needs to be made sure that, if the trust uses its clubs on the competitor, the law will use its own clubs on the trust. This will preclude the crushing of the new producers. The second potentiality, the bad one in the case, will then be removed, while the first and good one will be restored. If the trust

has much to dread from the civil power, in case it ruins competitors unfairly, it will give them a fair field. This is all they need; and, with this assured, they will appear promptly whenever prices are raised to an extortionate level. But such a rise will not take place. The potential competitor will protect the public from extortion, because a potency residing in the law annihilates the trust's power to destroy him. From every point of approach we are led to the conclusion that the law must disarm the trusts—it must take away the weapons which are available only for evil. The railroad problem must first be solved and fair treatment for all shippers must be secured. Then factors' agreements, the local cutting of prices and the predatory breaking of a scale of prices must be forbidden, and there must be a real force behind the prohibition.

The difficulties in the way of such a policy have not been denied. Are they insurmountable? Some thoughtful persons have said so; but this verdict has resulted from considering merely the power of statutes, the ease of evading them and the skill of the tech-

nical lawyer in securing immunity for those who evade them. The case does not, however, depend on statutes. There is the never-to-be-abandoned principle of common law, that a monopoly is contrary to the public interest and definitely outlawed. There is the fact that mere size affords presumptive evidence that a corporation is liable to this condemnation. There is the evidence to be had from the raising of prices and the shutting down of mills. There is needed further evidence from the treatment of rivals. It is not impossible to discover when a trust is clubbing its competitors, in one or more of the ways that have been described. Forbid such practices and prescribe as severe penalties as you will for resorting to them. Let the statutes give every chance to suppress them. Make the local cutting of prices, the breaking of a scale of prices for a predatory end and the factors' agreement illegal and punishable; and do what you can to secure an execution of the law. In doing this you will not have exhausted the power of the state, nor will you have drawn on it in the most available way; for there

will remain the common law demand for the repression of monopoly. On the courts there will continue to rest the duty of detecting the monopoly and pronouncing the condemnation; and, if the evil practices continue, the monopolies will exist and invite the court's decree.

The actual present situation is one in which a hundred great corporations would become unrestrained monopolies and liable to the fullest condemnation, if it were not for a certain amount of potential competition. But the extent of the influence that this kind of competition exerts is insufficient. Within limits a trust may raise its prices unduly, because the competitor cannot be drawn into the field except by a large inducement. He must have a prospect of gain that will offset a peril. Society can count on his coming when it pays prices that are high enough to lure him into the danger, but not before. Up to this point the trust can have its way. It is a true monopoly with limited powers; and only because of this limitation does the common law fail vigorously to assert itself. We are establishing in the body economic a state which resembles that condition

induced in an individual body by taking in small quantities of a poison against which the system revolts. As the medical term expresses it, we are "establishing a tolerance" of monopoly. We are reconciling ourselves to a limited exercise of its power for evil, in view of a certain power that it has for good. There is peril for the state in this course, which will strengthen decisively the growing demand that the government shall take industries into its own hands and manage them for the public welfare.

What is needed is to make each one of the practices by which competitors are terrorized legal evidence of the existence of a monopolistic power and to condemn, under the common law, any corporation that shall afford this evidence. This procedure should be made so sure that the competing producer will always dare to come when he is wanted. He will not be safe, if he cannot produce goods cheaply; but if he can do this, his continuance will be assured. The law will then take in hand the power that would treat him unfairly. The clubbing of independent producers can be de-

tected, and it is not impossible directly to punish it, if the people will show determination; but it is worth more to use it as a decisive addition to the mass of evidence which, under the common law, can convict the monopoly. The duty of convicting it now rests on the courts, and accordingly there rests on the legislatures the duty of making the conviction practicable. It is the privilege of the people to hold the legislatures to this duty.

CHAPTER V

CONCLUSION

WELL in sight is the policy of the future in relation to trusts. It is one which welcomes centralization, but represses monopoly. It allows mills and shops to grow large and to combine with each other, for the sake of the economy which this growth insures; but it puts a stop on predatory uses of the power that is thus gained. It yields nothing to monopoly, but employs the statute-making power to strengthen in every way the condemnation that the common law pronounces on it. Its purpose is to blend efficiency in production with equity in distribution, insuring to the country that shall succeed in carrying out the policy a wealth-creating power which will tell greatly in international rivalries and will be gained without sacrificing the rights of any class of its citizens. An abundance of riches

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will come by means of it; but contentment, harmony, and even fraternity, which are worth more than crude abundance, may, in the end, come also. To the country that shall, at an early date, unite in this way collective prosperity with internal harmony, there is offered a position of economic leadership. It will have over other countries the same advantage which a man has over other men when he precedes them in the use of efficient machinery, gaining large profits for himself and forcing his rivals to follow in his footsteps, in order to save themselves from being crowded out of the field. It is not merely because he has the machine, but because he has it before others get it, that he reaps a return in profit and power. The country that shall early utilize the power of the trust for good, while curbing its power for evil, will have as its reward national profit and a position of leadership among nations.

It will be impossible to secure as much as this without insuring another thing which is worth even more; for progress is in itself the *summum bonum* in economics, and that society is essentially the best which improves the fast-

est. No state can be good if it is stationary, or bad if it is now advancing at a satisfactory rate. It is the direction and the rate of social progress which afford the supreme test of the quality of an economic system. Competition always insures a forward movement. Our plan proposes to keep it alive, first, as the immediate protector of farmers, laborers, consumers and independent producers. We wish it to act so that no one of these classes can now be plundered. But we cannot keep it alive for this purpose without getting the benefit of its more important service, — that of spurring producers to greater efficiency. Regulate trusts, if you can, by a cruder method and you are likely to see them putting a damper on inventive genius. You may see them suppressing improvements, in order to use old machinery the longer. Regulate them solely by the power of competition, and you will force them to be alert in utilizing improvements, if they would save themselves from the fate that has always awaited the tardy and unenterprising. A small shop with a good machine may undersell a big shop with a poor one. It may end by becoming big, while

its rival dwindles. Size affords no immunity from the law that writes over the door of every business house permission to live, on the sole condition that it shall forever increase its efficiency. For future progress more than for present relief must we rely on keeping alive the power of competition. The rate of our own real progress will vary with the degree of our success.

What is needed is a *laissez faire* policy in one sense of that term, but not in another sense. It involves no dull letting alone of an evil tendency, but it does involve allowing a natural development to go on unhindered. Clear the decks for action; remove all obstacles which stand in the way of a healthy rivalry in production—this has always been the sound rule, and obedience to it has always insured progress.

In the outlook that is opened to a country which shall combine high centralization with effective competition, there are features which we have not taken the time to discuss. In this new régime there is a probability of greater steadiness in the general economic movement. "Booms" and depressions may not succeed each

other as they have done. The commercial crisis may become a less dangerous phenomenon.

There may also be afforded, before long, an enlarged field for secure investments. The bonds of industrial companies should, in the end, become a safe form of property for even poor men to hold. With improvement in the mode of investing savings, there should be an increase in the amount of the savings themselves. High wages, with safe depositories for unconsumed wages, should result in larger accumulations made by laborers; and the true proletariat, in so far as it shall survive, may become only a remnant of the present wage-earning class. The majority of those who labor may possess capital and the additional influence which property brings; and the stake which they have in the social order may make them use their influence with conservatism and intelligence. A steady upward trend of the level of human life should follow the development that combines centralization with competition. This is a result as well worth working for as any that has ever been offered to men, and should call forth the heroic effort which overcomes every diffi-

culty that does not amount to a physical impossibility.

That the society of the future will combine economy with progress, both collective and personal, and that it will do this by following a plan which is at least in the general line of the course here advocated, is made nearly certain by the nature of the other courses which are possible. These are two in number. We may either continue to make ineffective prohibitions or we may adopt the rule of *laissez faire*, leaving growing monopolies and their occasional rivals to fight out the issue as best they can. If this means a state that is barely endurable; if it leaves in the hands of the consolidations vast power for evil and reduced power to do good, with a lessened motive for using it; if it ends by establishing in the mind of the people what in medical language is a partial "tolerance" of monopoly—it will put a permanent blight on the development of our state and transfer to others the place of leadership which is now offered to us. If, on the other hand, the monopolies get the upper hand, throwing off more and more the checks that now limit their

power, the result will be state socialism. Beyond a moderate distance the tolerance of private monopoly will not go. Under such conditions the state would be urged to take possession of industries that assume a genuinely monopolistic form. The contest that must ensue over such a transfer would involve a wasteful and paralyzing division of forces; and, if the transfer were actually to be made, there would remain the possibility—or, rather, the imminent probability—of an anarchic period and a later reorganization of the industrial system on a competitive plan. This experience would be ruinously costly, and it would be optimistic to expect that at the end of it we should find ourselves in as favorable a position as the one we are now enjoying.

It is better, however, to reach the goal of general prosperity, which is now directly before us, without the destruction and the rebuilding of the fabric of society. Long, indeed, would it probably be, after a plunge into state socialism, before we should attain the stage of advancement that we have now reached. Increased efficiency in production, through rapid

improvement in industrial methods and the invention of automatic machinery; higher wages, with the diffusion of much property in small holdings, to offset the concentration of other property in large ones; greater steadiness in the movements of trade, dispensing with financial and industrial crises — in short, the attainment of those economic conditions under which political democracy may exercise its full power for the good of all classes depends on the maintenance of competition, in spite of inevitable consolidation.

TRUSTS

OR

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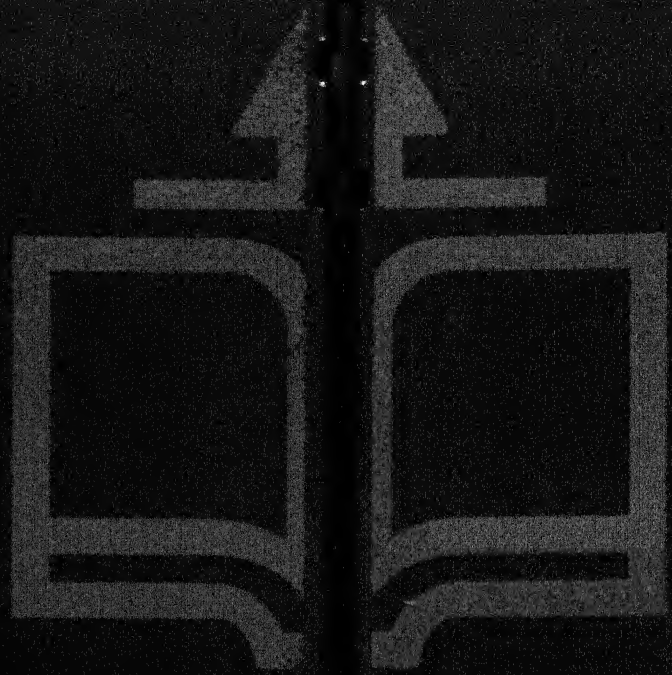
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THE ECONOMICS OF EVERYDAY LIFE

A FIRST BOOK OF ECONOMIC STUDY

by

SIR T. H. PENSON, K.B.E., M.A.

LECTURER IN MODERN HISTORY AND ECONOMICS AT
PEMBROKE COLLEGE, OXFORD



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PREFACE

Political Economy, or, as it is more generally called at the present day, **Economics**, is a subject which has hitherto found very little place in a general education. This is no doubt partly due to the way in which it was presented by many of the earlier writers. They treated it in so abstract a manner that it seemed far too difficult and far too removed from ordinary experience for young students to derive any educational or other advantage from its study. As a matter of fact, however, the subject is an intensely practical one; it deals with problems of everyday life, and everyone can find abundant material for observation and comparison in his own home and in his own surroundings.

Moreover it is being increasingly recognised that for the proper discharge of the duties of citizenship some knowledge of Economics is absolutely essential. Great social and economic problems are constantly needing solution, and those who are called upon to assist in that solution by supporting or opposing any particular measure or line of action should have a sufficient understanding of economic cause and effect to be able to act with judgment and conviction. The foundation of such economic study

may well be laid during the period of school life, but for this a text-book is necessary in which the essential features of the subject are simply described and clearly explained.

An introductory book of this kind is besides often felt to be a necessity even by those of more mature years, social workers and others, who are taking up the subject for the first time.

The present work is an attempt to supply both needs. It is strictly elementary in its character, and should therefore be regarded as a stepping-stone to more advanced study. Considerable use has been made of simple diagrams, the idea being to show at a glance and to emphasize the facts that have been explained in the text.

T. H. P.

OXFORD

January, 1913.

NOTE ON THE SECOND EDITION

THE Currency changes brought about by the Great War have been so great as to necessitate the re-writing of the section on Money. This subject has now been brought quite up to date.

T. H. P.

LONDON.

September, 1927.

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BOOK I

INTRODUCTORY

CHAPTER I

THE SUBJECT OF ECONOMICS

"Economics is the study of mankind in the ordinary business of life." MARSHALL¹.

To most of those taking up this book **Economics** will be a new subject of study. It is therefore very necessary at the start to make quite clear the exact meaning of the term.

The name itself is not very attractive. It seems to suggest something difficult and uninteresting, but as a matter of fact it stands for a science dealing with certain matters of everyday life of which everyone has heard and with which everyone is more or less familiar.

This science seeks to explain a great deal of what is going on all round us. We see men and women, and sometimes boys and girls as well, going about their daily work, all busily employed in what we call "earning a living." They all have wants which, if they did not work, would have to remain unsatisfied. The effort made to

¹ Late Professor of Political Economy in the University of Cambridge.
Author of *Principles of Economics*, etc., etc.

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procure the satisfaction of their wants is called **economic effort**, and Economics deals with the **causes**, the **nature** and the **results** of such effort. In other words **man's activity in supplying the needs of himself and his family is the subject of Economics.**

It must be remembered, however, that this is a **social science**. It deals with certain actions of men living together in an organized community; not with those actions which a man may perform in which his fellow men are in no way concerned, but with actions which bring him into contact with others and which affect others as well as himself. All have read tales of adventure in which some unfortunate person is shipwrecked on an uninhabited island. He shows the most marvellous ingenuity in making use of the few things he has saved from the wreck to render his life comparatively comfortable. This activity is frequently called economic inasmuch as it is devoted to the satisfaction of his wants. He is hungry and cold and exposed to the attacks of wild animals or of savages from some other island. He needs food, clothing and shelter, and he has to work hard and to think hard, to use both his hands and his brain, before he can get them. Yet the science of Economics is not concerned with actions such as these, because they affect only himself and because his circumstances are altogether exceptional. It only takes into account the economic effort of men living with other men, working with others, dependent to a certain extent on others, giving in exchange for the services or goods of others their own services or the products of their own labour.

Again, in every household there are actions performed daily which, though they aim at the satisfaction of wants, can hardly be regarded as coming within the scope of Economics. I refer to the household duties of the wife and the assistance in them perhaps of her older children,

as well as to the many forms of service which members of a family continually render to one another. Economics would take notice of the activity of each individual breadwinner of the family in the getting and spending of his or her income, but cannot take notice of home services performed in the interests of the family as a whole, without payment and without measurement.

We shall therefore regard as outside the scope of our subject such forms of activity as the endeavours of the man living in solitude to provide for his wants, and the domestic duties and labours of love which form a characteristic feature of the family life.

It is frequently asserted that Economics is the **Science of Wealth**, but this seems to be looking at the subject from a wrong point of view. **What we are really studying is not wealth but man.** It is true that we confine ourselves to that part of man's activity which has to do with wealth, but none the less the subject is man, his wants, his efforts to supply those wants, his use of what he has obtained by his efforts, his dealings with his fellow men which must take place before his wants can be satisfied. Wealth plays a very prominent part, but it is throughout subordinate to man and his activities. In short, Economics deals *primarily* with **man as wanting, working, getting, spending**, and *secondarily* with the **wealth** which can satisfy his wants, which he helps to produce, and of which he gets a share, first in the form of money income and then in the form of the various things on which the income is expended¹.

THE SOCIAL SCIENCES.

It has been already stated that Economics is a social science, that is to say it deals with men, not living alone or

¹ The exact meaning in Economics of the term *wealth* will be discussed in Chapter III.

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on desert islands, but, as we are accustomed to see them, living in close contact with their fellows, living in organized societies of which every individual member has certain definite relations to the society as a whole as well as to the other members of it. These relations are of such different kinds that it is usual to classify them—to mark off the different sets of relations from one another, to study them separately and to give to each study a distinctive name. Economics is only one of many social sciences, it deals with but one of these sets of relations, and therefore it will be useful to mark off the *economic* as clearly as possible from the other departments of man's social activity.

We can think of a man as having various social activities:—

1. He is a member of the human race, bound to other members by the tie of a common humanity and by the obligations common in all forms of society.

2. He is a member of a family or household, bound to the other members by the ties of blood and common interest.

3. He lives in some particular town or village; he shares therefore in its activities and submits to local regulations.

4. He belongs to a particular country and nation. He is a subject of the State. He recognises its government and is bound by its laws.

It is in these various capacities, as a **social being**, as a **householder**, as a **neighbour**, as a **subject**, that man finds a field for those social activities which we are now seeking to classify.

In the first place there are certain general principles underlying man's thought and action in all stages of social development, and in every relation of life. The study of these is called **sociology**.

Secondly, there are certain moral considerations and principles which affect his conduct and which constitute a standard of right and wrong. The study of these is called **ethics**.

Thirdly, there are certain laws and regulations imposed on a man by the community or State to which he belongs. Some things are allowed to him, others are forbidden. The study of these limitations placed on his freedom of action is called **law** or **jurisprudence**.

Fourthly, in every human society there arises the need for organization, for government. The governing body of the State exercises control over the individual members, and the individual members render it obedience. The study of the principles of government and of the relations existing between the subject and the State is called **political science** or **politics**.

Lastly, a considerable portion of man's social activity is devoted to the satisfaction of his wants. The study of man's actions in getting and spending his income is called **political economy** or **economics**.

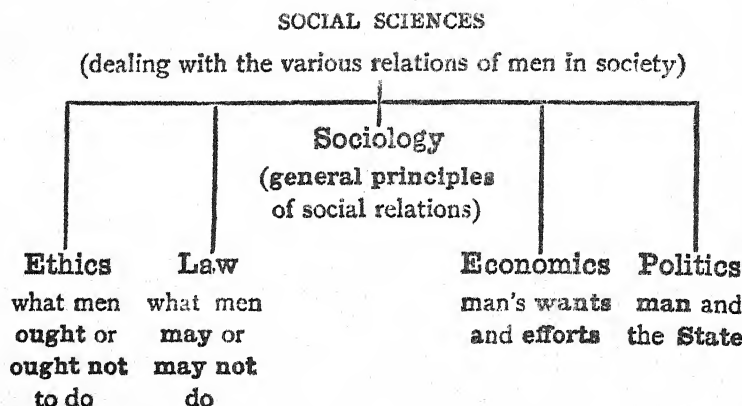
We have marked off four kinds of social relations, the **ethical**, the **legal**, the **political** and the **economical**, but it is not always easy to keep them apart in practice. For example, we commonly regard all questions of taxation, of the revenue and expenditure of the State, as coming under the heading of *Economics*. But taxation is a function of government and might therefore be regarded as *Politics*. Again, much of man's economic activity springs from other than economic motives. He works not only from a desire to satisfy his wants, but also from a sense of duty; he is animated perhaps by family affection, or by a desire to help others. Thus his motives are ethical or social as well as economical.

In spite of this overlapping, and in spite of the difficulty of tracing a clear boundary line, we are able in the main to

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distinguish these sciences from one another, and we shall have no difficulty in deciding which of man's actions are economic even if they are influenced by moral considerations, by the restrictions of the Law and by the requirements of the State.

The scope of the different social sciences may be roughly indicated by the following diagram:—



CHAPTER II

THE DEVELOPMENT OF ECONOMIC LIFE

"Wants—efforts—satisfaction...this is the circle of
Political Economy." BASTIAT¹.

ECONOMIC ACTIVITY.

Having now got a clear idea as to what Economics is and as to how it is related to the other social sciences, it becomes necessary to look a little more closely into the nature of what is called **economic activity**.

¹ A French writer on economic subjects; born 1801, died 1850.

The fundamental cause of all economic action is that men have wants. These wants lead them to make certain efforts, and through these efforts they obtain the satisfaction of their wants. This must be our foundation—wants lead to efforts and efforts bring satisfaction—and on this we must build our economic structure.

When, however, we look at the industrial life around us, the connection between these three—wants, efforts and satisfaction—does not seem so clear. A man wants bread but as he is a carpenter he makes tables or cupboards. The children of another man want boots, but he is a clerk and works all day in a counting house. Yet in either case we may say that bread and boots for the family are the final outcome of the father's work. He has not produced them, but someone else has, and the result of one man's effort is exchanged for that of another. It is evident therefore that under modern conditions men are economically dependent on one another, and by supplying each other's wants they really satisfy their own. There was a time when everyone produced just what he needed to supply his wants, and in some parts of the world people still do so to a limited extent, but this is not the case with people in a country like England. In most countries to-day people devote their energies to some particular work or employment, and what they earn in that way they spend in providing for their wants. Let us trace the history of this very important change.

STAGE I. Direct Effort.

Beginning with men in a savage state, we notice how very clear is the connection between their wants and the efforts they make to supply them. The wants of the savage are fewer than our own, but they are no less urgent. He is hungry and he must get food. He lives

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perhaps on the flesh of wild animals, and these must be hunted and killed before his hunger can be satisfied. If he catches more than he can eat, the surplus is of no use to him, for he has no means of preserving it, and so when he is again hungry he must obtain fresh supplies. Each recurring want leads to a corresponding effort; and it will be the same with his other wants. He will no doubt make some kind of hut for purposes of shelter, collect shells for ornament, fashion vessels for cooking or for holding water, make the weapons he needs in the chase, or, if he lives beside the water, hollow out the trunk of a tree to make himself a canoe. This may be called the **first stage** of economic life. The **want** calls forth an **effort** which results in the **direct satisfaction** of the want.

Stage I

WANTS——EFFORTS——SATISFACTION

In all the stages of development these three ideas are inseparable from one another. In Stage I the connection is **direct**, in the later stages it is **indirect**.

STAGE II. Indirect Effort.

The state of things just described is of course a very primitive one, and even among savages we shall find that economic life tends to become a little more complicated. We can imagine that a member of the tribe gets injured, and can no longer go hunting. While the others are away he possibly spends his time making weapons or fashioning some tool or ornament. Why does he do this? Not because he wants more of these, but because he wants food, and he knows that he will be able to exchange the results of his effort for the food brought home by another of his tribe. His effort is not now expended on that which will *directly* satisfy his want, but on that which will

do so *indirectly*. In time the injured man will, from practice, get such skill and dexterity in his occupation that his weapons or ornaments will be in great demand, and he will find that by devoting himself altogether to the making of them he will get far more given him in exchange than he himself could have produced by direct effort. As men become more civilized the economic advantage of keeping to one trade will become more and more evident, and instead of the individual members of the community supplying their own wants directly, each man will be pursuing some particular calling and exchanging what he produces for what he needs. **Division of Labour** as it is called has been introduced. The wants of men become more numerous and their efforts result in a far greater amount of satisfaction.

This then is the **second stage** of development. The want leads not to an effort which will bring *direct* satisfaction, but to one which will bring satisfaction *indirectly*. Between the effort and the satisfaction of the want there is now a gap and this gap is bridged by barter i.e. the **exchange** of one product for another. Thus:—

Stage II

Exchange



STAGE III. The Industrial Group.

It is not necessary for our present purpose to trace man's development through the various stages of productive effort—the hunting, the pastoral, the agricultural, the age of handicraft and the age of machinery. Our object is to show how the complex economic life of to-day is connected with the simple economic life of more primitive man. We pass over therefore the progress of civilization

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and the changes of industrial method and confine our attention to the one point—the way in which the effort brings the satisfaction of the want.

The *third* stage in this development may perhaps be seen to a certain extent even among those we call savages, but it does not become general till society has made considerable progress in the arts of life. Not only has man found the necessity or advantage of producing for the wants of others, but he has learnt to combine his work with that of others, he has learnt the value of **association** and **co-operation**. In this stage the **Division of Labour** is carried still further. A group of men undertake a task, assigning to each member of the group some particular portion of it. Let us take as an example the building of a canoe. In the *second* stage the canoe builder would have chopped down the trees he required, and would have himself done all the processes of shaping, covering, etc., with which we are so familiar in Longfellow's *Hiawatha*¹. But in the *third* stage one man will fell trees, another prepare the wood, a third will

¹ For building his canoe, Hiawatha took the bark from the birch-tree and fastened it over a framework of cedar wood—"like two bended bows together." The whole was bound together with the roots of the larch, and the seams were closed with resin from the fir-tree. Lastly the finished canoe was decorated with hedgehog's quills, stained red and blue and yellow.

"Thus the Birch-Canoe was builded
In the valley, by the river,
In the bosom of the forest;
And the forest's life was in it,
All its mystery and its magic,
All the lightness of the birch-tree,
All the toughness of the cedar,
All the larch's supple sinews;
And it floated on the river
Like a yellow leaf in Autumn
Like a yellow water-lily."

perhaps prepare the covering and a fourth may do the actual construction. So far the change has not been very great. Four men had wants, and by combined effort they produced that which would indirectly bring the satisfaction of their wants. But when the canoe is finished, a difficulty arises—whose is the canoe? It belongs doubtless to all four, and when food has been obtained in exchange for it, the food belongs to all four. But how much of the food will each get? Will they share it equally or will some get more than others? It is possible that one may have worked longer than the others, or that for his process more skill was required, or, what is of very great importance, his particular abilities may have been of an unusual character and so his services were in great demand. Before each man can have that which will satisfy his wants, it is evident that a new economic process is needed—that of assigning to each member of the industrial group his particular share of that which is obtained in exchange for the finished product. This is the process known in Economics as **Distribution**, and Distribution is perhaps that division of our subject which leads to the greatest difference of opinion and which requires the most careful thought.

We may now sum up the special features of this third stage of development. Men with individual wants to be satisfied unite their efforts, or *co-operate*, as it is called, in the production of some particular thing. But between the effort and the satisfaction of the individual want the gap is now wider. The food which is obtained for the canoe by barter belongs to the industrial group jointly. The share of each member of the group must be determined according to some principle of **distribution** before his effort can actually result in the satisfaction of his wants.

Stage III

Exchange

Distribution

WANTS
of indi-
vidualEFFORTS
as member
of a groupSATISFACTION
of wants of
groupSATISFACTION
of wants of
individual

STAGE IV. The Use of Money.

There are two main differences between the type of industrial life just described and that which we may observe going on all round us:—

(1) Our industrial effort is far **more complex**.

(2) We effect exchange by means of **money and credit** instead of by barter.

Let us examine the *former* of these rather more closely. In Stage III we noticed that the combined effort of the group resulted in the turning out of a canoe, but to-day the manufacture of most things involves the combined effort of a great many such groups. Take for example the production of a suit of clothes and notice the number of groups concerned.

1. The wool-growers, probably in Australia.
2. The various groups of people connected with trains, steamers, docks, etc., who helped to bring the wool to this market, and to transfer it from one set of producers to another.
3. Wool merchants.
4. Wool spinners.
5. Woollen cloth makers.
6. Tailors.

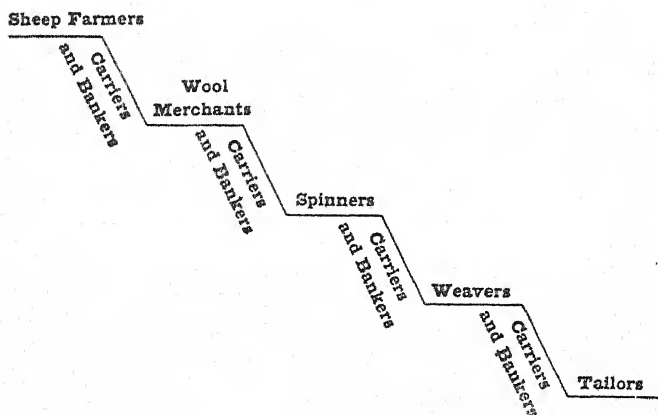
7. Bankers and others whose help was needed in each separate transaction ;

to say nothing of the effort of those who supplied tools, etc., to each group.

Thus before the suit of clothes could be offered for sale many groups of workers (many more probably than have been mentioned) had to be employed. The services of each group received a *joint* payment which had to be *distributed* among the members of that group.

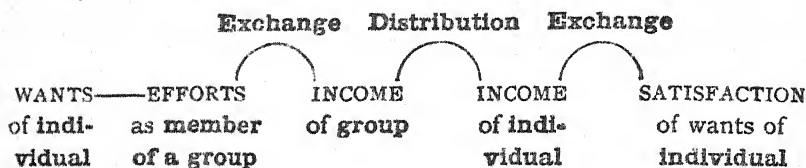
This very **complex effort** can be indicated by the following diagram:—

COMPLEX EFFORT



We must now consider the *second* important point of difference, viz. that the use of **money** or of **credit** (which as we shall see later on is often a substitute for money) takes the place of barter. The earnings of each group are expressed in a **money income**, so also is the share of each individual who expends what he gets in the satisfaction of his wants.

Stage IV



Thus in this *fourth* stage, the stage which every modern industrial society has reached, the gap between the effort and the satisfaction of the want is a very wide one, and at least three bridges are needed to span it, viz. the sale of the product, the **distribution** of the proceeds, the **purchase** of what is desired.

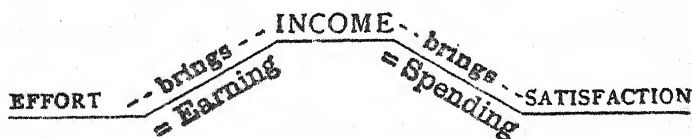
It may perhaps be urged that even under present conditions men may provide directly for some of their wants, e.g. a man may work in his garden or in an allotment and grow vegetables, etc., for the use of his household. But even here the effort is only partially direct. He has doubtless bought the seed or plants as well as the tools with which he works, so this direct effort necessitates some previous indirect effort. Besides, this forms so trifling a part of his activity that it can almost be neglected. Generally speaking it is true to say that in the present stage of economic life man's efforts to supply his wants are in almost every instance indirect¹.

EARNING AND SPENDING.

In this short sketch of the development of economic life an attempt has been made to show that in all the different stages, however much the fact may be disguised, the essential connection between wants, efforts and satisfaction remains unaltered. Wants lead to effort, and effort

¹ To make more clear the connection between the four stages of economic effort a table is inserted at the end of this chapter, repeating the diagrams already given with short notes on each.

brings more or less satisfaction of the wants. But man himself has changed. His wants have become more numerous, more complicated, more refined. He demands far more in the way of food and clothing and shelter; he has, besides, intellectual requirements—learning, art, music, the drama; he needs recreation and amusement. Further, we notice that at each successive stage the gap between effort and satisfaction gets wider and wider and various methods have been employed to bridge the chasm. As things are arranged to-day, very little economic effort is direct—that is to say, the majority of people who want food do not set to work to produce food, but they do various other kinds of work by which they earn an income and out of that income they purchase the food they want. An intermediate step is thus introduced between effort and satisfaction, namely **income**, and this may be represented in the following manner:—



When we talk of *making both ends meet* we are merely putting into a well-known phrase what is suggested by this diagram, viz. that what comes in as the result of a person's efforts is all that can go out in the satisfaction of his wants; and that even if, as sometimes happens, people spend their income (or part of it) before they actually get it, they have to be careful not to spend more than they can be sure of getting. **Income is spending power** and spending power is limited by the size of the income.

We are now in a position to make the following statements (see diagram above):—

- (1) **Income** is the central economic fact.

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- (2) There is a definite relation between
- (a) the character and duration of the **effort** and the amount of the **income**;
 - (b) the amount of the **income** and the amount of **satisfaction** that can be obtained with it at any given time and place.

The relation between **effort** and **income** depends on

- (1) the **nature** of the effort;
- (2) its value and **remuneration**;

that between **income** and **satisfaction** on

- (1) **how** the income is used;
- (2) the **prices** of the goods and services obtained in exchange for it.

The study of these relations covers the most important part of our subject and will necessarily include:—

- (1) The effort which is the source of Income, or **Production** (BOOK II).
- (2) The passing of wealth from hand to hand by means of sale and purchase, or **Exchange** (BOOK III).
- (3) The determination of Individual Income, or **Distribution** (BOOK IV).
- (4) The spending of the income to obtain the satisfaction of wants, or **Consumption** (BOOK V).
- (5) The contribution from individual income to form the income of the state, or **Taxation** (BOOK VI).
- (6) The effects on Income of **Trade Unions** and **Co-operative Societies** (BOOK VII).

¹ Books V—VII will be found in Part II.

STAGES OF ECONOMIC EFFORT

STAGE I.

WANTS—EFFORTS—SATISFACTION

The Effort is **Direct**. It is devoted to the Production of the thing desired.

STAGE II.

WANTS—EFFORTS—SATISFACTION

Exchange

The Effort is **Indirect**. It is devoted to the Production of something which can be **exchanged** for the thing desired.

STAGE III.

WANTS—EFFORTS—SATISFACTION

Exchange Distribution

of individual as member of a group of wants of individual

The Effort is **Collective and Indirect**. The produce resulting from the effort of a group is **exchanged** for the things desired, and these are **distributed** among the members of the group.

STAGE IV.

WANTS—EFFORTS—SATISFACTION

Exchange Distribution Exchange

of individual as member of a group Income of individual of wants of individual

The Effort is **Collective and Doubly Indirect**. The produce resulting from the effort of the group is **exchanged** first for money or its equivalent, and this when **distributed** is again **exchanged** for things that will satisfy the individual wants.

BOOK II

THE SOURCE OF INCOME

CHAPTER III

THE NATURE OF PRODUCTIVE EFFORT

"The production of wealth is but a means to the sustenance of man ; to the satisfaction of his wants ; and to the development of his activities, physical, mental, and moral." MARSHALL¹.

WEALTH AND WHAT IT IMPLIES.

The first main division of our subject is concerned with that economic effort which, as has already been pointed out, is the **Source of Income** ; such effort is directed towards what is generally known as the **Production of Wealth**. Here we have two terms—**production** and **wealth**—both of which need very careful explanation. It will be more convenient to take the latter first.

Nothing seems easier than to give a definition of **wealth**. We constantly use the term, and there is no uncertainty in our minds as to its meaning. But when the word is used in Economics it has a much more restricted sense than it has in ordinary speech. Thus we may say that there are two uses of the term, the popular and the scientific, the one is rather broad and vague, the other is very definite and precise. It will be wise to distinguish carefully between them.

¹ See footnote to page 1.

In ordinary speech wealth is contrasted with poverty. It is another name for riches. A man is said to be wealthy when he has ample means, when he is richly provided with that which will bring him comfort or even luxury. But in the economic sense of the term, both the rich man and the poor man have wealth, the difference being that the rich man has much of it, and the poor man but little. Now, what is it of which *A* has so much and *B* so little? The answer is simple—"Power to satisfy his wants." This power is represented by Income. *A*'s power in this respect is far greater than *B*'s, but *B* must have some power to satisfy his wants or he would starve.

Both *A* and *B* then, from the point of view of the Economist, may be regarded as having wealth. But a further point must be noticed. It was shown in Chapter II that the satisfaction of economic wants comes through effort. Someone, not necessarily the person who gets the satisfaction, must have made the effort. For example, in a lawless condition of society, one man may take by force from another the fruits of his labour; or, as frequently happens, one person may receive a present from another. The effort of one person has resulted in satisfaction to another. Satisfaction which is obtained without effort on anyone's part is outside the sphere of Economics. If, therefore, anything is to be regarded as **wealth** two conditions must be fulfilled:—

- (1) it must have **power to satisfy a want**,
- (2) it must be **the result of effort**.

The air we breathe satisfies a want but we can obtain it without effort, it can be had as we say for the wishing, therefore it is not to be regarded as wealth. But to the diver in the hold of the wreck, air is wealth, for effort is needed to keep him supplied with it. Again what is wealth

to one person is not necessarily wealth to another, and what is wealth at one time and place may not be wealth at another. A thing does not constitute wealth merely because it is the result of effort but because in addition it has power to satisfy the want of some particular person. A piano would satisfy no want of a savage, although it must have taken a great deal of effort to make it and to carry it to the island where he lived. To him therefore it is not wealth. But if the savage recognised the fact that he could exchange the piano with a trader for something else he really wanted, then the piano would be wealth to him because it could bring, though indirectly, the satisfaction of his wants. Or again a house may have taken a long time to build and may have been built with very expensive materials, but if it is in so undesirable a situation or is so uncomfortable that no one is willing to live in it, that house cannot be regarded as wealth. Similarly, sand may be wealth in the builder's yard, but it is not wealth in the middle of the Sahara; ice is wealth to a fishmonger in the summer, but it is not wealth to the Esquimaux who are continually surrounded by it. The essential fact is that wealth cannot be regarded as something by itself but only in its relation to man and his wants.

What has been said about the economic use of the term wealth may now be summed up in the following statement:—**Everything is wealth to us which has power to satisfy our wants, and which cannot be obtained without effort.** Popularly the idea of wealth is connected with abundance; with a plentiful supply of the good things of life, with a large income. Economically it applies to everything that can satisfy man's want, provided that it cannot be obtained without giving something for it in the form of labour or of goods.

Economic writers have differed very much as to what should be included under the term *wealth*. Some take

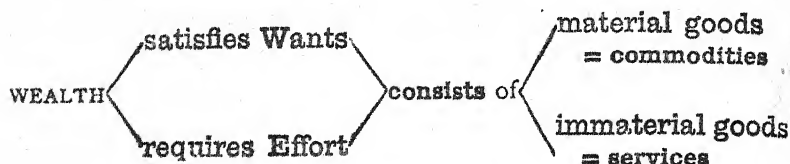
a very narrow view. They admit that wealth implies power to satisfy wants and that wealth is the result of effort, but they only allow one kind of effort, viz. that which results in material objects or, to use the words of Adam Smith, "vendible commodities." According to these writers therefore the term wealth is limited to things that we can perceive by our senses or that we can store up or pass on to others. But if we go back to our definition we shall see that wealth means a great deal more than this—"Everything which has power to satisfy want and which cannot be obtained without effort." Let us think of some of the things people want and in exchange for which they must give a part of their time or a part of their income, in other words, for which they must make some effort. They must pay for the house which shelters them, for the clothes they wear, for the food they eat—all these are **material goods**¹. They must also pay for the various kinds of services—of soldiers and sailors who protect them, of actors and singers who amuse or entertain them, of domestic servants who cook for them and wait on them, of railway officials, of cabdrivers, etc., who make it possible for them to travel from one place to another—and all these services are **immaterial goods**. It is evident therefore that the things that can satisfy our wants and for which we must make some effort are of two kinds, material and immaterial, and that, according to our definition, wealth includes them both, services as well as commodities. The accompanying

¹ That which can satisfy a want is in the language of Economics called a "good." Material goods are of two kinds—(i) those which can only give a passing satisfaction, such as food and drink, (ii) those which can give a continuous satisfaction lasting over a much longer period, such as houses and clothes. The former are called **perishable goods**, the latter, **durable goods**.

Material goods may also be classified according to the use to which they are put. If, like everything we eat or wear, they are used for the direct satisfaction of wants, they are called **Consumption goods**, but if, like machines, tools, or raw material, they are used in the production of other goods and so satisfy wants indirectly, they are called **Production goods**.

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diagram will illustrate this conception of wealth and indicate the meaning which will be attached to the term in the following pages.



THE MEANING OF PRODUCTION.

We have considered the meaning of the term **wealth**, now we must consider the meaning of **production**. Production may be defined as the application of effort to the satisfying of wants; it is that form of activity which results in wealth. Production only takes place because there are wants to be satisfied; we produce because we want to consume. If little is produced, few wants can be satisfied; if much is produced, many wants can be satisfied. It is very easy, however, to attach a wrong meaning to the word *produced* and so it would be wise to take one or two examples in order to make this quite clear.

When the savage procured the meat he wanted for his food, his effort was an act of *production*. If he brought home an ample supply, he produced much, but if he brought home less than was required to satisfy his hunger we may say that he produced little. Or take the carpenter, according to the number of articles he was able to complete within a certain time, we might say that he produced little or much. But what was it that the savage and the carpenter produced? The former did not create the meat, because the animal was there before. His effort consisted in killing the animal, bringing it home, and preparing it for food. The animal roaming wild in the wood could not satisfy his hunger—it must be in a form and in a place in

which he can utilize it; he must have it when, where, and how he needs it. Similarly with the carpenter, the wood was there before and so were the necessary tools, but with the help of the tools he has changed the form of the wood, and now there is a table or a cupboard which can satisfy his own wants or those of his customers.

In each case there has been *productive effort* and by this effort new utilities—i.e. new powers to satisfy wants—have been produced. **The Production of Wealth**, therefore, does not mean the creation of that which satisfies the want but the creation of additional capacity for satisfying want. To the savage the meat had more utility than the wild animal, to the carpenter the table had more utility than the wood—what each has produced is the difference between the utility before and the utility after the effort in question was made. This can be expressed in the form of a subtraction sum.

Utility of meat			
minus	=	wealth produced by effort	
utility of animal		of savage.	

Utility of table			
minus	=	wealth produced by effort	
utility of wood, etc.		of carpenter with help	
		of tools ¹ .	

A man's productive effort is sometimes spoken of as *labour*, but now-a-days the term *labour* is generally confined to a particular kind of effort—viz. the effort exerted by the working man. It has seemed better, therefore, to use the term *effort* to indicate the work performed by human beings in general to secure the satisfaction of their wants. That is to say the term *effort* may be applied alike to the work of the manufacturer and the farmer, the soldier and the sailor, the lawyer and the doctor, the

¹ The wear and tear of the tools is for convenience disregarded.

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bricklayer and the miner, the laundress, the factory girl and the messenger boy.

The term *production* must not be used in too narrow a sense. (1) It covers the whole effort from start to finish—from the growing of the raw material to the delivery to the consumer of the finished article. New utilities have been added at every stage, until the work is completed and the want is satisfied which was the original cause of the productive effort. (2) It covers the services rendered by all who have in any way contributed to the final result—the services, not only of those whom we are accustomed to think of as workers and whom we can see daily engaged in office or workshop, but also of those who by placing their wealth, whether it be land or capital, at the disposal of the workers, are themselves contributing in no small degree to the satisfaction of human wants.

PRODUCTIVE AND UNPRODUCTIVE LABOUR.

The earlier economists such as *Adam Smith* and *John Stuart Mill* made a great deal of the distinction between what they called productive and unproductive labour, whereas to-day the distinction is not considered of any importance whatever.

How can we account for this change of view? It is mainly a question of terms. According to these writers *productive* labour results in wealth while *unproductive* labour does not; but the term wealth is by them confined to material objects, therefore all effort (such as that of the lawyer, soldier, domestic servant, etc.) which is not embodied in material objects is unproductive.

Our definition of wealth on the other hand is much broader as we have already seen—it covers the results of every kind of effort that helps to satisfy wants.

All economic effort therefore is, in intention, *productive*, because it aims at satisfying wants, and it is only

unproductive when it fails altogether of its object. What is of real importance to us to-day is—not whether the effort is productive or unproductive—but whether it is more or less productive, i.e. whether the effort expended results in the production of a large or a small amount of wealth. If we want to increase the wealth of the country at large we must make our economic effort as productive as possible, that is, we must seek to get the greatest amount of satisfaction with the least possible effort.

Different degrees of productivity are noticeable everywhere. One savage brings home more food than others, one artisan turns out more goods than others, one manufacturer or trader is more successful than others, the industry of one country is more flourishing than that of another. All these are differences in the productivity of effort, and these differences play an important part in the social and economic conditions of individuals and of nations.

THE FORMS OF PRODUCTIVE EFFORT.

It has been noticed¹ that the great feature of industrial effort under modern conditions is its complex character, and that the individual want can only be satisfied by the successive efforts of many groups of workers. In studying therefore the nature of productive effort, it is necessary to consider it from three points of view:—

- (1) The combined productive effort of many groups.
- (2) The productive effort of a particular group.
- (3) The productive effort of an individual worker.

I. The Combined Productive Effort of Many Groups.

By this is meant the sum of all the efforts necessary before the want can be satisfied. The main thing to

¹ See Stage IV on page 15.

notice in this connection is that there is no deliberate co-operation on the part of the various groups making this combined effort. There is no organizer or director of the whole assigning to each group any particular share. It is a division of labour, but not a division resulting from any definite plan or scheme. The example given on page 13 will afford us a suitable illustration of this. In that example the united efforts of various groups resulted in a suit of clothes. The wool growers had no idea of joining with merchants, spinners, weavers or tailors in producing the final result. To each group its own productive act was final. Each business undertaking realized its own income which provided the incomes of all workers in it. It was enough for each group that its goods or services were in demand. The main consideration with the growers was that merchants would buy their wool, with the merchants that spinners would buy the wool of them, and so on. The effort of each group was intended to satisfy the wants of the individual workers in that group, and each had found by experience that in this way the income could best be obtained. Each group by satisfying the demands of the group next beyond it was really satisfying its own. Each group therefore with regard to the final result works independently of the others and without apparently realizing that its effort is only a part of a much wider effort, that its effort will not really be complete till other workers in various parts of the world have done their share, and the finished article is finally in the hands of the consumer.

II. Productive Effort of a Single Group.

The great feature of the productive effort of an industrial group is its **organization**. The Division of Labour is arranged on a definite plan, the co-operation of all the workers in the group is deliberate. This

constitutes a very important point of difference between the effort of a single group and the combined effort just described.

Of the industrial group there are many types. One group may be engaged in what is called *extractive* industry, e.g. **farming** or **mining**. The effort consists in raising from the soil or obtaining from beneath the surface of the earth various forms of vegetable or mineral wealth. Another group may be engaged in some **manufacture**, as for example that of cotton cloth or of china. A third may devote its energies to **transport**—by road, or rail, or sea. A fourth may be engaged in **commerce**, in transferring through the agency of purchase and sale the raw material from the grower to the manufacturer, or the finished article from the manufacturer to the retailer. A fifth may devote itself to **financial** matters, to enabling buyers and sellers often at a great distance from one another to settle their money affairs without trouble and with comparatively little expense. A sixth may be engaged in **retail trade**, buying goods in large quantities and selling them in small parcels to suit the needs of particular customers, or as in the case of the tailor, giving the final form to the goods themselves according to individual requirements. These groups will differ very much in size and in composition. A mine or a factory may give employment to a board of directors, a manager, a staff of clerks and thousands of other workers; a small grocer's business on the other hand may only give occupation to the grocer himself, an assistant and an errand boy.

All these forms of productive effort have certain features in common :—

(1) The group in every case consists of all (employers and employed, landlord and capitalist) who look to the particular undertaking for the income which is the reward of the services rendered.

(2) In every group there is some directing and controlling power which co-ordinates the efforts of the individual members of the group and directs them towards a definite goal.

III. Productive Effort of the Individual.

Although it is only through the effort of the group that the goods are produced which when sold provide the income, yet it is possible and desirable to think also of each member of the group as an individual. The output is the result of the joint effort but to the quality and quantity of that output each individual has contributed. The prosperity of the business is affected by the character of each individual's effort and, though the income of the individual worker is, as a consequence of Trade Union policy, far more influenced by the prosperity of the trade as a whole than by that of the business in which he himself is engaged, yet it is to a certain extent and in the long run also true to say that the prosperity of the individual worker is affected by that of the industrial group to which he belongs.

Two features of the individual's work should be carefully noticed :—

1. **The dependence of one member on another.** The employer is dependent on the efforts of the employed, the employed on the organizing capacity of the employer. Further, each individual worker has his own job, but he cannot do it if the material is not duly passed on to him in a state ready for him to begin work on it. Take an example from a chocolate factory. The girl who fashions chocolate creams cannot make more than she has the materials for, and the man who passes these on to her gets them from someone who performs some earlier task of mixing. Someone takes the creams from the girl who has made them and they are passed on from hand to hand until they are neatly packed in boxes, tied up with ribbon,

packed in large cases and finally despatched. From start to finish each worker has been dependent on the work of others.

2. The work of each is incomplete; it is a contribution to the general result; no one person more than another can say of the finished article that it is his own work. Let us take an example from the furnaces used in the manufacture of steel tubes. The final result is due to the joint effort of many. The man who dexterously rushes the sheet of iron into the furnace and the man at the other end who withdraws it when it is heated to the precise point required cannot point to anything at the end of the day and say, "I made this." He has helped to make a steel tube and so have many others. He has completed nothing.

It has been shown that the success of one man's effort is affected by the effort of other members of his group, and it could also be shown (1) that the success of any particular group is affected by the efforts of the other groups taking part in the combined effort, (2) that the prosperity of individuals and groups is affected by the general prosperity of the community. An example will make this clearer. Let us go back to the familiar one of the suit of clothes. When there is general prosperity more suits of clothes are ordered, this will make more work for tailors, which will lead to larger orders being sent to cloth makers who will need more woollen yarn; this will lead the spinners to require more from the merchants, who will want to buy more from the growers. But if, for example, the growers had no more wool, wool would probably be dearer and that would affect all the successive groups who pass the wool through its various stages.

A word must be said in conclusion about the individual worker who is not a member of such an industrial group, but who, like the mediaeval craftsman, works independently

and supplies his own customers with what they need. There are still many such, but their work can hardly be regarded as typical of modern productive effort. The small boot-maker or the jobbing gardener may be taken as examples of this class, as also may many members of the learned professions such as doctors and barristers. Their effort can be measured without reference to the effort of others, and their income follows as a direct consequence of their own skill and industry.

CHAPTER IV

THE REQUIREMENTS OF PRODUCTIVE EFFORT

"Besides the primary and universal requisites of production, labour and natural agents, there is another requisite...namely, a stock, previously accumulated, of the products of former labour." J. S. MILL.

It has been shown that the satisfaction of economic wants comes through effort, but it is very evident that more is wanted than the mere willingness or ability to do what is required. The savage wants food, but three things are necessary or he will not get it:—(1) if he lives on the flesh of birds or of animals, the birds and animals must be within his reach, (2) he must make the required effort, (3) he must be provided with the weapons or implements

¹ John Stuart Mill, the most famous of English classical economists, was born in London, 1806. His father James Mill is also known as an economist and as the author of a *History of British India*. As a child J. S. Mill was extremely precocious. He began Greek at three, studied logic at 12, and at 13 went through "a complete course of Political Economy." He was a great thinker and writer in many branches of science, his chief works being—*A System of Logic, Principles of Political Economy*, and treatises *On Liberty, On Representative Government*, etc. He died 1873.

of the chase. And similarly in another stage of industrial society: the farmer must have soil to cultivate, seed to sow, ploughs and other implements to use, or he cannot make the effort necessary to provide himself and others with bread.

What is true of direct effort is true also of indirect. The effort made may be of many different kinds but it will in most cases be found that a want cannot be satisfied without (1) the existence of some natural objects or powers, (2) the application of some personal strength or skill, (3) the use of some artificial aids such as tools, materials, etc. I have said in *most* cases because, as before suggested, there are two classes of wants, and two kinds of wealth which can satisfy them, viz. material and immaterial. Now it is evident that the three requirements just mentioned are only necessary for the effort which results in material objects; and that they will not all be necessary for the effort which results in immaterial forms of wealth such as services. For example, *A* may earn his living as a public singer, *B* as a doctor, *C* as a messenger. *A*, *B* and *C* are making efforts which depend almost entirely on natural gifts and personal effort and which need very little if anything in the way of artificial aids. On the other hand it must be remembered that *A*, *B* and *C* all have material wants such as food and clothing and that though their own effort may have been made without external help, yet the efforts made by others to supply their wants needed all three of the requirements.

Speaking generally therefore we may say that there are **three requirements¹ of productive effort**, viz. :—

(1) **The Natural.** Gifts of Nature, both objects and forces.

¹ Most economists apply the terms **Land**, **Labour**, and **Capital** to these requirements of productive effort and speak of them as the **Factors of Production**.

(2) The **Personal**. Man's own energy and skill.

(3) The **Artificial**. That which man has made or has set aside to assist him in his effort.

Wants	leading to	Efforts	requiring	Natural forces Personal activity Artificial aids	resulting in	Satisfaction
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In all the four stages of economic activity described in Chapter II, these three requirements of productive effort are equally indispensable though not perhaps of equal importance¹. But the change in the character of the effort which has taken place in Stages III and IV gives rise to **two additional requirements** which are in reality two other forms of **personal activity**. When the effort is made by an industrial group and when industrial undertakings are on a larger scale a new factor is introduced, viz. **Business Organization**. And, further, when the market instead of being purely local and certain becomes world-wide and uncertain, when instead of supplying the wants of a few people in his own neighbourhood the producer seeks to supply the wants of people in many and distant lands, business becomes to a greater or less extent speculative, and **Risk-taking** or **Enterprise** becomes another requirement of Industrial Effort.

From what has now been said about industrial effort, we are in a position to make the following statements:—

(1) Before a man can satisfy his economic wants he must make an effort—he must use his powers of mind and body—= **Labour**.

(2) Where the effort is made by an industrial group that effort must be organized if it is to obtain satisfactory results—= **Organization**.

¹ The comparative importance of the requirements is discussed at the end of this Chapter.

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(3) To start and to carry on a business undertaking involves risk. It may result in profit or in loss. This risk must be taken by some person or persons—= **Enterprise**.

(4) Man in his effort utilizes Natural Objects and Natural Forces—= **Gifts of Nature**.

(5) Most forms of effort require (a) tools or machines, and (b) materials. Moreover, production takes time, and until the work is completed and sold those taking part in it are being supported by results of past labour—= **Capital**.

The requirements may also be classified under two heads :—

A. **Forms of Human Activity.**

B. **External Aids.**

A. **Human Activity.**

(1) **Labour.**

(2) **Organization.**

(3) **Enterprise.**

B. **External Aids.**

(4) **Gifts of Nature.**

(5) **Capital.**

Labour, Organization and Enterprise are clearly marked off from the external aids—the Gifts of Nature and Capital, inasmuch as they are forms of human activity. Man is a consumer as well as a producer—his wants supply the motive for his efforts. He produces in order that his wants may be satisfied. The wants and the effort react on one another. The greater a man's services to production the more is he able to consume (i.e. to apply to the satisfaction of his wants), and the converse is often true, viz. that the higher a man's standard of living, the more capable is he of rendering efficient service.

Each of the requirements must now be considered more in detail and the distinguishing characteristics of each noted.

A. FORMS OF HUMAN ACTIVITY.

1. **Labour.** This term is frequently used as if it were equivalent to man's economic effort in general, and in this sense it is applied to the part played by him in the Production of Wealth. Such effort is of many kinds—there is the effort of the employer and that of the employed, the effort of the brain worker and that of the artisan. There is unskilled effort which requires mere physical strength, and there is skilled effort which requires thought, knowledge and dexterity.

Many on the other hand speak of *Labour* as if it applied only to the effort of the manual worker—they connect *Labour* with *Labourer*. There are others again who would regard *Labour* as the industrial force antagonistic to *Capital*.

The first of these uses of the term is too wide, the others are too narrow. In Economics we use the term in a very special sense and it is important to notice this so as to avoid possible confusion. For convenience, we may regard all workers—no matter what their station in life, or the particular trade or profession they follow—as belonging to one of two classes:—

Class I. Associated Producers—persons working together in organized industrial groups such as would be needed to carry on the business of a factory, a bank, or a shop. Some of the workers in such a group will be employers, the rest will be employees.

Class II. Independent Producers—such as doctors, barristers, or skilled workmen who themselves make what is ordered by their customers. Each member of this class may be described as being "his own master."

Now we are in a position to define *Labour* in its strict economic sense. The term *Labour* in Economics may be said to cover the efforts made to secure the satisfaction of

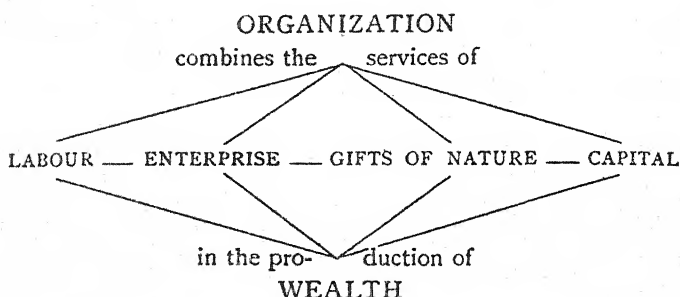
their wants by all members of Class II and by the employed members of Class I.

2. Organization. It is only in recent times that economic writers have recognised this as one of the requirements of productive effort. With the increased use of machinery and with the increased size and complexity of the industrial group, it has become evident that organization plays a very important part and that it must be treated as something quite distinct from the efforts it co-ordinates and directs. Organization may be regarded as the work of the employers. In a private business the organization is in the hands of the heads of the firm; in a Joint Stock Company it is in the hands of the Directors who usually act through a General Manager. The employed members of the group are concerned each with his or her particular task, but the Business Organizer is concerned with the productive effort as a whole, and he alone can regulate the relation of the various parts to that whole. Like a general he marshals the forces under his command. He selects the situation best suited to the industry in question. He decides what shall be the character and extent of the buildings, the nature of the plant, the type of the machinery, the quality of the raw material, the patterns of the goods, the number of workers of the various grades and capacities. Under his control are the Natural Agents, the Labour, and the Capital employed in the undertaking; the success of the enterprise depends on his skill, judgment and foresight¹.

3. Enterprise. The taking of the risks incidental to modern industry and trade may well be regarded as a separate service to Production. It is commonly supposed that this is merely one of the functions of the business

¹ The part played by Organization in the Production of Wealth is shown in the diagram on page 36.

organizer and that it may be included therefore under the term **Organization**. In a private business, it is true, the heads of the firm often render the threefold service of business organization, of capital, and of enterprise. But this is by no means the only type of business, and, as there are businesses in which the risks are not taken by the organizers, enterprise and organization must be kept distinct.



As a matter of fact **Enterprise** is a service which may be rendered by any section of those taking part in the productive effort. For example:—

(1) In a *Private Business*, as has just been shown, the risks are taken by the **organizers**.

(2) In a *Joint Stock Company* the risks are taken by the **shareholders**—that is by the **capitalists**—and not by the business organizer¹.

(3) In a *Society of Co-operative Producers* the risks are taken by the **workers** themselves.

¹ When we see the word *Limited* after the name of a Company—and the Limited Liability Company is nowadays the type of business enterprise—we are reminded that the risks of the concern are not being taken by those who manage or direct it, but by the shareholders (that is, by those who have provided the capital), and that the risk of each shareholder is limited to the amount of capital he or she has subscribed.

Enough has now been said to show :—

(a) That Enterprise is a requirement of productive effort.

(b) That Enterprise should be considered as something quite distinct from Organization, Capital or Labour.

B. EXTERNAL AIDS.

4. **Gifts of Nature.** These are generally summed up in the one word **Land**¹. But this is not a very satisfactory term, for it does not in any way suggest the real character of the part played by Nature in productive effort. The Land is one of the most important of natural agents, but it is only one of many. In this book therefore the term *Gifts of Nature* is used instead as being more descriptive and more comprehensive.

The *Gifts of Nature* are as various as they are widespread. Nature provides :—

- (1) The soil and all its properties.
- (2) Vast stores of mineral wealth.
- (3) The air we breathe.
- (4) The climatic conditions which assist or hinder man's economic efforts.
- (5) The various forms of animal and vegetable life, each endowed with powers of reproduction.
- (6) Forces of various kinds, such as light and heat, wind and water, steam and electricity.

These are some of Nature's Gifts and man is constantly discovering and utilizing new ones. To Nature's bounty man owes the very conditions of life, the objects on which his energy is expended, the forces which he sets in motion,

¹ "By Land is meant the material and the forces which Nature gives freely for man's aid, in land and water, in air and light and heat." Marshall, *Principles of Economics*.

and the powers of hand and brain which give him mastery over them.

5. **Capital.** The term *Capital* will at the outset require some explanation. When a man has obtained wealth he can do one of two things with it—either he can use it in the satisfaction of his immediate wants, which is called **spending** it; or he can put it aside with the intention of satisfying his wants at some future time, which is called **saving** it. What a man saves he either uses himself or lets other people use in such a way as to bring him in an income¹. Wealth devoted to some purpose with the intention of obtaining an income from it is called *Capital*. Thus a man's *capital* is part of his wealth, and the same things may be called *wealth* or *capital* according to the use to which they are put. Take, for example, a motor car. If its owner uses it for pleasure we should say it is *wealth* to him, but if he uses it as a doctor would for professional purposes, it is a form of *capital*. It helps him to make a larger income because with it he can see a much larger number of patients.

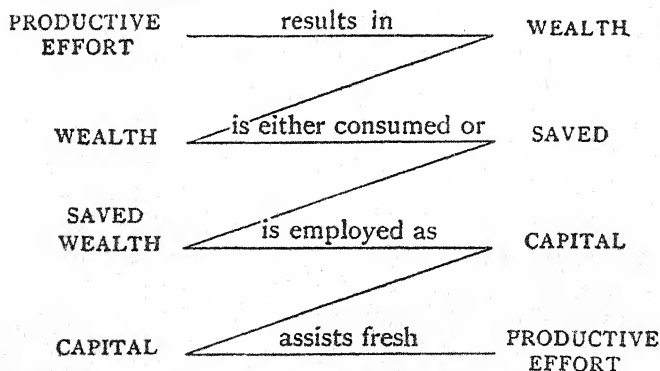
Capital may be looked at from two points of view. To the individual owner, the capitalist as he is called, it is a means of getting an income. But to the man who uses it in his business as well as to society at large it is a requirement of productive effort, a means of increasing enormously the result of man's economic activity.

The capital of a particular company or business is always expressed in terms of money, but we must not suppose that it is in the form of money. For example, the capital of a certain boot factory is said to be £100,000. This capital really consists of buildings, plant, machinery, patent rights, stores of leather and other material, a stock of finished boots and shoes waiting to be sold, a certain amount of cash sufficient for current expenses, etc., etc.

¹ Mere hoarding is not saving in the economic sense of the term.

These forms of capital are generally grouped under two heads—**Fixed** and **Circulating**. Capital which is capable of rendering repeated services is called **Fixed Capital**, that which can only perform its service once is called **Circulating**. Under the former head come the buildings, plant, machinery and patent rights; under the latter, raw material, finished goods and money¹.

It is usual to speak of Nature's Gifts and Human Activity as primary factors of Production and of Capital as a secondary or derivative one. That is to say, the first two are not the result of previous effort or former production, but Capital would not have existed at all if there had not been some wealth produced out of which it could have been saved. Capital plays a double part. (1) It is *a part of wealth* and therefore the **result** of productive effort, (2) it is *a factor in production* and therefore a **requirement** of productive effort.



¹ It might be noticed that money would be circulating capital to an individual producer because it can only be used once by him in making a purchase, and that done it has taken for him another form, viz. that of the raw material or other article purchased. But to society at large money seems to be fixed capital because it is very durable, and the same coin can be used over and over again; in fact from this point of view money seems to be like a great machine which facilitates exchange of goods and services, but which wears out very slowly in the process.

Relative Importance of the Requirements.

An attempt is sometimes made to compare the relative importance of the requirements just described. Some maintain that *Labour* is all important, others will put *Capital* first. Some have emphasized the part played by *Nature*, others, that played by the *Business Organizer*. Where all are indispensable it is extremely difficult to put one before another, but it might be suggested that at different times and at different stages of industrial development, different requirements have had special prominence. In a primitive state of society, *Nature's Gifts* are everything. Where Nature is generous, men are in comfort, where she is niggardly they suffer want and hardship. This affects their numbers and their habits. In the desert for example we find nomadic tribes—small as regards numbers and very scattered. They wander from one oasis to another; they are herdsmen and not agriculturists. But, under more favourable circumstances, man developed a power to control Nature and her forces, and *Labour* came to the front. Later still, with the introduction of machinery and steam power, *Capital* challenged the supremacy of *Labour*. In recent times, with the rise of large business undertakings, *Organization* of a high order has become a necessary condition of success, and it begins to take a place hardly inferior to that occupied by *Labour* and *Capital*.

A further point of difficulty is this. It is contended by some that human beings alone are capable of effort and that therefore Nature's Gifts and Capital are not to be considered as taking any part in Production. But it must not be forgotten that in a state of society in which there is private property in land, and in which individuals through saving have acquired capital, the owners of such Gifts of Nature and Capital, by placing them at the disposal of producers, may be said to take part in the productive effort.

In conclusion, the productive effort is a collective one. It embraces the services rendered by employers and employed, by landlords, by capitalists and by those who undertake the risks. Under skilled organization numbers of workers, supplied with raw material and with mechanical appliances, direct their energies to the production of that which will satisfy the wants of their fellow men and so through the income they receive, indirectly satisfy their own.

PRODUCTIVE EFFORT

embraces the

SERVICES

of

GIFTS OF NATURE	rendered by	OWNERS OF LAND and of other Natural Resources
LABOUR	" "	EMPLOYED WORKERS in a group or by Independent Workers
ORGANIZATION	" "	EMPLOYERS and Directors
ENTERPRISE	" "	SHAREHOLDERS or other Capitalists
CAPITAL	" "	CAPITALISTS

CHAPTER V

PRODUCTIVE EFFICIENCY

"Energy and efficiency in work and enterprise in the formation and employment of capital are the two factors on which material progress mainly depends." CUNNINGHAM¹.

HAVING considered the nature and requirements of productive effort we must now turn to another aspect of the question, viz. the results of such effort. It is not enough to know what economic effort is and to understand the part played in it by the various factors; we must go further and seek to find out what conditions are most favourable to its success. The effort was made for a definite purpose: viz. the satisfaction of wants. What relation is there, we may ask, between the effort and the amount of satisfaction obtained? The object of all effort is to secure the greatest possible amount of satisfaction, or, as some writers have expressed it, to secure the maximum of satisfaction with the minimum of trouble. But, as has already been mentioned more than once, the effort is indirect, it does not result in the production of that which will satisfy the particular want. The people around us are engaged in various forms of effort all designed to satisfy the wants of others. In this way they earn their living, they get their income; and this income they will spend in purchasing the commodities or in paying for the services which will give them the desired satisfaction. The amount of satisfaction, therefore, obtained as the result of any given effort, depends not only on the work done but also on the willingness of others to pay for it; in other words, what a man gets by his labour depends on the market there is for what he produces.

¹ Rev. W. Cunningham, D.D., Archdeacon of Ely, author of *Growth of English Industry and Commerce*, etc., etc.

In estimating then the relation of effort to satisfaction four things must be taken into account:—

(1) The **quantity** and **quality** of the goods produced or of the services rendered.

(2) The **market value** of such goods or services, which affects the income of the group as a whole.

(3) The **share** of this joint income which goes to the individual worker.

(4) The **prices** of those goods and services on which he expends his income.

One of the most obvious facts of the economic life going on around us is that all effort is not equally productive. One tradesman succeeds and another fails; one manufacturer makes large profits and another makes hardly any; one company pays a good dividend and another a very poor one. To explain fully the causes of this difference would require an intimate knowledge of the circumstances of each individual business; but for our purpose it will be sufficient to consider the conditions which affect the productivity of effort in general.

The conditions of productivity may be grouped under two heads, **internal** and **external**. *Internal* conditions have to do with the productive effort itself in the factory or on the farm, in short, with the **way the work is done**. *External* conditions affect mainly the **marketing** of the produce, and the question whether the price realized is sufficient to adequately remunerate the efforts of the various members of the industrial group.

1. The principal *external* conditions are:—

(1) The locality of the industry and its distance from the market.

(2) The conditions prevailing in the market.

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(3) The efficiency of the other productive groups with which it is connected.

(4) The competition of other producers.

(5) The economic policy of the government.

One or two examples will help to make this clear. We may say that wheat-growing in some particular place is unproductive. The farmer may be a very capable man and the soil may be exceedingly fertile. Owing to these internal conditions the crop may be a very heavy one and comparatively little effort has produced a large amount of wheat. But the productivity of the effort expended on wheat growing is not only measured by the number of bushels obtained; it depends also on what the wheat will fetch when sold. Now if this land is situated in a remote spot, at some distance from any large market; if the place is badly served by railways or steamers; if the banking system of that country is undeveloped; if when the wheat gets to the market that market is already overstocked and the price of wheat low; if some government regulation such as a special tax imposes some extra burden on the wheat grower; then so much has to be deducted from the price of the wheat for the cost of marketing it that very little may be left for the grower and in spite of the abundant harvest his efforts will prove to have been to a certain extent unproductive.

Again—one very frequently hears the complaint that fruit or vegetable farming does not pay. The cost of carriage, the regulations of the market, the over-supply or glut of a perishable article¹, act against the industry of the grower and again his effort is less productive than he had hoped and expected.

¹ A particular crop such as strawberries, ripens in the different districts at very much the same time, so that when strawberries are "in season" they must often be sold at a very low price to get rid of them while they are good.

All questions connected with sale and purchase and with the determination of the shares of individual producers will be taken up in later chapters, here we must only concern ourselves with *the first step towards satisfaction*, viz. the act of production.

2. The *internal* conditions of successful industrial effort may be summed up in one word—**Efficiency**. We may improve our means of transport, we may have a most enlightened commercial policy, but if there is not industrial efficiency our efforts are not likely to be very successful.

The great question for every individual producer, for every industrial group and for the nation at large, is—How may the requirements of industrial effort, individually and in combination, be made most efficient? An answer to this will best be found by examining in turn the conditions of efficiency of the Gifts of Nature, of Labour and of Capital.

To begin with the **Gifts of Nature** of which it will be sufficient to take two examples, Land and Water-power.

Land. The productivity of land depends on three sets of conditions :—

(a) The **Natural**, e.g. fertility, climate, etc.

(b) The **Social**, e.g. situation relatively to centres of population.

(c) The **Economic**, e.g. the way in which Capital and Labour are applied to it.

Each of these requires explanation.

The **Natural** conditions of productivity are easily called to mind. Of these the chief are the character of the soil and of the subsoil, the climate, the aspect, the minerals that lie hidden underground.

The **Social** conditions include not merely the situation with regard to the market, but also the conditions of transport and communication which facilitate the conveyance of

goods from one place to another. Land, we say, is well situated if its produce can be easily and cheaply brought to market. These social conditions are continually changing. To-day there may be parts of the Canadian Middle West where a farmer can only just live by his work because of the difficulty of marketing his produce. But an industrial centre springs up in his neighbourhood, or an extension of the railway passes near his farm, and as a result of this social advance, working on his land becomes more profitable; the land, we say, is now more productive.

The **Economic** conditions are connected with the application to land of Capital and Labour.

Natural conditions are not to be regarded as fixed or unalterable, for man has found out means of modifying them. The properties of the soil can be changed by various kinds of dressing, land too marshy can be drained and land too dry can be irrigated, climate can be modified by the planting of trees, by glass houses and other forms of shelter, by the application of heat, etc., distance from sea can be got over by the digging of canals. But it must be remembered that this modification is brought about by Labour and Capital, and though we speak of the land as becoming more productive, the increased productivity is not the gift of Nature, it is the direct result of productive effort.

Examples of such change of natural conditions are not difficult to find. The *Haarlem Meer* in Holland was at one time, as the name suggests, a wide expanse of water; now it is an extremely fertile district famous for its production of bulbs. The *Fen District* in the Eastern Counties of England was once practically useless from an economic point of view; now it is drained and is well known for its magnificent pasturage. The *Eastern parts of Belgium* were at one time little more than a sandy waste. Now they have been converted into an agricultural district where

cultivation of a most intensive character is carried on¹. The application of Labour and Capital has entirely modified the original conditions and in places where production was once impossible, industry and prosperity now prevail.

Before the middle of the 18th century very little had been done in England in the way of applying Capital to the cultivation of the land, but about that time changes began to take place of so far-reaching a character as to have earned the name of "The Agrarian Revolution," in the course of which an enormous advance was made in agricultural methods. Under the old conditions farming was for the most part carried on as a means of obtaining the necessities of life, under the new conditions it became a business enterprise carried on with a view to making a profit. The new methods—rotation of crops, stall-feeding, etc., made at first very little progress because of the *Open-field* System which then prevailed over the greater part of the country. Under this system the arable land of the village was divided into three large fields, two of which were cultivated each year, the third remaining fallow. These fields were subdivided into a very large number of acre or half acre strips separated from one another by a narrow turf bank or "baulk." The strips cultivated by a particular farmer did not lie next to one another but were scattered over the three fields. After harvest the cattle were turned on to the stubble. Each farmer had also the right to a certain portion of the pasture land, and he had certain grazing rights on the waste. Under such a system all progress was impossible. Everyone had to do

¹ "Man, not nature, has given to the Belgian soil its present productivity... the small and naturally unfertile province of West Flanders not only grows the food of its 580 inhabitants on the square mile but exports agricultural produce to the value of 25s. per head of its population." Prince Kropotkin, *Fields, Factories and Workshops* (1898).

as his neighbours did : raise the same crops, plough, sow and reap at a given time.

Before new methods could be introduced and Capital applied to the land, the fields needed to be *enclosed*. That is to say, each farmer must have his farm in one compact whole, properly fenced off from his neighbours. He would then be free to follow the system of cultivation he thought best, and to reap the benefits of his individual skill and enterprise. As a result of the Enclosures large farms took the place of small ones, the whole system of agriculture was altered and the land became infinitely more productive¹.

What a contrast there is between a modern farm with its agricultural machinery, its improved implements, its tested seeds, its continuous use of the land, its scientific methods, and the old-fashioned *three-field* system, with its hand labour and primitive implements, and with everything regulated by custom and tradition.

Water-power. Of the forces provided by Nature which man has used to assist him in his productive efforts, one of the most widespread and one of the most useful is **water-power**. But, strange to say, it is only within the last few years that there has been anything like a real attempt to conserve and to utilize the immense force which lies hidden in every stream and waterfall. It is the discovery and utilization of another great natural force, viz. **Electricity**, which has roused public attention to the value and importance of water as a motive agent. Electricity must be generated and for this powerful machines must be set in motion. In England this is usually done by means of the great natural force called steam, and this again is

¹ By the end of the 18th century population had enormously increased and the migration to the towns had begun, so that there were more mouths to feed and a smaller proportion of the people were engaged in food-producing. Such a state of things was met partly by improved methods of production, and partly (though at first only to a very small extent) by importation of food.

generated by the use of coal, or gas, or oil. But in countries like Canada or Sweden, where water-power is abundant and where coal is difficult to get, the electric current is in many places obtained by controlling and regulating this force which Nature has so liberally provided.

When machinery was first introduced into industry, as a consequence of the inventions of Hargreaves and Arkwright, the only motive force available was water-power. The new mills were therefore for the most part built on the banks of the swifter rivers and we find the cotton spinning industry, for example, localized on the western slopes of the Pennine Range. But the supply of water was limited and irregular, and the means of regulating it were crude, hence the application of steam-power to machinery led to the establishment of industrial centres on the great coal-fields and to the neglect of water-power as a motive force.

To-day, however, the development of engineering science has made it possible to utilize the force of the rushing torrent in a far more economical way. Instead of being used to turn the wheel of a single mill, water-power is now applied in such a way as to generate energy sufficient to supply the needs of a considerable district. For this the water-power is economized. A part of the stream is diverted and conducted to great vertical tubes, at the bottom of which turbines are placed. These work the dynamos, and electric power is generated which can be transformed to a very high voltage and then transmitted by service lines to quite distant places. The greatest of such works at present in existence are probably those of the Ontario Power Company at Niagara. Water is taken in about a mile above the Falls. It enters a kind of bay where it is freed from solid matter and it is then passed along tubes or conduits 18 feet in diameter for a distance of some 2000 yards, that is to a point below the falls.

At the end of these conduits steel penstocks 9 feet in diameter and 307 feet long lead vertically downwards, then turning at right angles they lead horizontally to the turbines. Each penstock supplies one turbine unit, and the capacity of each turbine unit is 25,000 horse-power. Over the turbines are the generators from which a current of 12,000 volts is conveyed by cables to the distributing station high up on the cliff behind. Here the current is transformed from 12,000 volts to 60,000 volts, and the 60,000 volt current is distributed wherever it is wanted. In New York State there are some 450 miles of lines carrying the electric current from Niagara to various places. Syracuse, some 170 miles distant, is thus supplied with electric light as well as with power for its tramways and its factories. On the Canadian side, in the Province of Ontario, transmission lines of some 300 miles in length carry the current to places within a radius of 150 miles from the falls¹.

From the point of view of *efficiency in production* this is of extreme importance. The cheapening of light in houses, public buildings, factories and streets, is in itself a great thing, but the provision of cheaper motive power for tramways, railways and industrial undertakings of every kind, is a far greater one. In fact it may safely be prophesied that the extended use of water-power for the production of electric motive force is likely to bring about a revolution in the industrial world, hardly less extensive than that caused by the introduction of steam. Just as in the 18th century the use of coal led to agricultural districts becoming densely populated manufacturing centres, so now the use of electricity may lead to a shifting of the industrial centre of gravity from the coal-producing countries to those which Nature has endowed with abundant water-power.

¹ These figures were given to the writer when he visited the power works at Niagara in the autumn of 1910.

Land and *Water-power* have been taken as examples of the Gifts of Nature. It has been shown that efficiency in production depends very largely on the use made of them. Improvements in agriculture are continually being made; new ways of using Nature's forces are continually being discovered. Every such improvement and discovery increases the amount of satisfaction that may be derived from man's productive effort.

The **Efficiency of Labour** is the next subject for consideration. When men are working in industrial groups efficiency of labour is the combined effect of many causes. It depends partly on the employer and partly on the employed, partly on organization and partly on individual effort, partly on the tools, machines, etc., with which the worker is supplied, and partly on his own skill and industry in making use of them. Two questions therefore need to be answered if we are to arrive at any solution of this problem.

1. What makes the individual worker efficient?
2. How does the employer contribute to the efficiency of labour?

The *first* question may be answered very shortly:—

- (a) The **power** to work.
- (b) The **will** to work.

Power to work is a question of fitness. An industrial worker in this respect is like a soldier or a football player, he must be fit if his work is to be well done.

This fitness is of four kinds:—

(i) **Physical fitness.** A man's physical fitness is partly a result of his upbringing, or, in other words, of the standard of living of his parents. If brought up in a condition of poverty, insufficiently fed and scantily clothed, he is probably incapable of great physical strain. A man's

fitness is also very largely dependent on his own standard of living and on his own habits of life. He needs suitable food, clothing and shelter, he needs a certain amount of healthy recreation, but he must avoid excesses of all kinds. Moreover, healthy conditions at home and in the workshop are necessary if a man is to be physically fit for his work. The importance of fresh air and exercise are being increasingly recognised, and many firms make special arrangements for the health and comfort of their employees. In works like those of Messrs Cadbury at Bournville, such arrangements include a swimming bath, a drill hall, a dining room, separate playing fields for the young people of both sexes, clubs for social intercourse. Such things have a great economic importance, as they tend to raise the standard of efficiency.

(ii) **Technical fitness.** This is a question of aptitude, of training and of experience. Many perhaps have aptitude but have never been trained. Many also have had training, but through lack of opportunity to practise what they have learned they tend to become inefficient and unskilled. One of the great causes of poverty and distress is that so many have not learned a trade. Even if there were employment for the great masses of unskilled labour, their work is necessarily inefficient and ill-paid. Technical unfitness leads to physical unfitness, inasmuch as it almost always results in a low standard of living; and this is bound to have a disastrous effect on the welfare and capacity of succeeding generations.

(iii) **Intellectual fitness.** This is a question of education. For a workman to get on at the present day, mere handicraft is not sufficient. He must be intelligent, his mental powers must be developed and trained. Such training does not end with the school, it may be said only to begin there. In many localities opportunities are now

afforded for intellectual training after leaving school, such as public reading rooms and libraries, evening classes and lectures, etc. Many working men to-day eagerly grasp every such opportunity and many have made them a stepping-stone to a University training.

(iv) **Moral fitness.** This is summed up in the word "character." Early training, religious and social influences, help to form character; but it depends very largely on the individual himself and on his strength or weakness of purpose. Habits of self-reliance and self-respect, of honesty and industry, mark the really efficient worker.

Will to work may be a consequence of a man's energy and force of character. He may "put his back into it," as we say, from a pride in his work or from a sense of duty. There are, however, other forms of stimulus—the desire to get on, the opportunity for advancement, a direct financial interest in the success of the undertaking with which he is connected—all of which materially affect a man's zeal for his work and consequently increase the efficiency of his productive effort.

The *second* question—"How does the employer contribute to efficiency?" must now be answered. If each member of the industrial group worked independently of the others, i.e. if each had a task which he could complete without reference to his fellows, the master would contribute to efficiency by seeing that all worked under the best possible conditions, supplied with the most suitable materials, tools and mechanical appliances, with everything in short that makes for fitness. But under existing conditions the work of the industrial group is much more complicated, and its efficiency depends on organization. This then, as was shown in the last chapter, is the special contribution of the employer. The work done by the group is not merely the sum total of what the men could do as

individuals. It is infinitely greater, and how much greater is a matter of organization. The employer decides whether the scale of production shall be small or large, whether few or many men shall be employed, what tasks are to be assigned to each, what form the capital shall take, what patterns of goods shall be produced, and what price he shall demand for each.

Having now discussed the conditions of efficiency of the Gifts of Nature and of Labour, we must pass on to those affecting **Capital**.

As with Labour, two very important considerations will be (a) fitness, (b) method of application.

Fitness depends on the suitability of the capital to the purpose in hand. Capital, as we have seen, takes many different forms—e.g. buildings, plant, machinery, raw materials, etc., and whether these are more or less efficient depends on their quality and on the work they have to do. Buildings might be stately and well-planned but they might also be too large or too costly for the purpose to which they are put. A locomotive might be of the most powerful modern type, but it might be used for work that a much lighter engine could do. Such use of capital could hardly be called efficient because it is not economical.

Again, a new or up-to-date machine is generally far more efficient than a worn or old-fashioned one, because, if the same amount of labour were applied to it, it would turn out a larger quantity and a better quality of goods. Printing supplies us with one of the most remarkable instances of the economy of using new types of machinery. In 1895, to print and fold 36,000 pages of a newspaper with hand labour took 216 hours, while to do the same amount of work with the newest type of machine only took about one hour¹.

¹ U.S. Labour Bulletin 54, quoted in Seligman's *Principles*.

American and Canadian manufacturers are known for the readiness with which they abandon an old type of machine as soon as there is an improved one on the market. A Canadian on a visit to the Mother Country was being shown round some large engineering works. The foreman who was explaining things to him pointed with some pride to an antiquated looking machine and said, "That lathe has been in use for more than a hundred years." The visitor, in whose own works everything was kept well up-to-date, replied with some amusement, "In Canada that would have gone on the scrap heap long ago. The scrap heap is the most paying part of my business." Competition is so great now-a-days that people can hardly afford to use anything but up-to-date plant and machinery.

A further point that must not be overlooked is that just as the efficiency of Labour is largely affected by the nature of the Capital with which it is employed, so the efficiency of Capital depends to a considerable extent on the use to which it is put by Labour. The best of machines are unproductive if badly handled. The bad workman, says the proverb, is apt to find fault with his tools; good material and good tools are essentials of efficient production, but they would be useless without skilled labour and capable management.

Some of the most important aspects of efficiency in production have now been discussed, but two very prominent ones still remain, viz. the Division of Labour and the Large Scale of Production. These will form the subjects of our next two chapters.

CHAPTER VI

THE DIVISION OF LABOUR

"In the progress of efficiency perhaps the greatest factor has been the principle of specialization or division of labour." SELIGMAN¹.

THE Efficiency of productive effort depends very largely on the extent to which **Division of Labour** is carried. If we compare the results of industrial activity to-day with those which were obtained even half a century ago, we notice what an enormous advance has been made in the methods of production; and further, if we look more particularly for the cause of this advance we shall find that a great deal of it is due to the fact that work has become specialized, that everyone, as a rule, devotes his energies to some one particular kind of work, and that even the simplest article of daily use is the result of the joint effort of many workers.

Adam Smith² was so impressed with the importance of the Division of Labour that he devotes to it the first three chapters of his great work *An Enquiry into the*

¹ Prof. E. R. A. Seligman, Columbia University, U.S.A., an American economist, author of *Principles of Economics*, *The Shifting and Incidence of Taxation*, etc., etc.

² Adam Smith, "the founder of English Political Economy," born at Kirkcaldy, in Scotland, 1723; educated at Glasgow University and at Balliol College, Oxford; Professor at Glasgow from 1751 to 1763; died in 1790. Noted for his advocacy of "natural liberty" in economic matters and more especially for his attack on protection and on the monopoly of the colonial trade by the mother country. His treatment of economic questions was extremely practical.

*Nature and Causes of the Wealth of Nations*¹. He first examines "the causes of this improvement in the productive powers of labour" and the opening words of Chapter I state the proposition which it is intended to prove. "The greatest improvements," he says, "in the productive powers of labour, and the greater part of the skill, dexterity and judgment with which it is anywhere directed or applied seem to have been the effects of the division of labour."

Our treatment of the **Division of Labour** will fall under four heads:—

- (1) Its general character.
- (2) Its various forms.
- (3) Its advantages.
- (4) Its disadvantages.

I. General Character.

John Stuart Mill regarded Division of Labour as one form of *Co-operation* or *Combination of Labour*. But here he was using the term Co-operation in the literal sense of working together for some common end, and not in the technical sense as employed in connection with the work of Co-operative Societies. According to Mill there are two forms of Co-operation—Simple and Complex. Simple Co-operation is working together to perform a task which is beyond the strength of the workers singly, e.g. one man alone could not move the trunk of a fallen tree, but several together can do so. On board ship one notices many acts of simple co-operation: e.g. the sailors going round the capstan, tightening a rope, or hoisting a sail.

In complex co-operation two or more persons work together for a common end by doing different tasks or

¹ This book was begun in 1766 and completed in 1776.

different parts of a task, e.g. when one man rears the cattle, a second tans the leather, a third makes the boots.

It is this latter form of co-operation that we call **Division of Labour**.

2. Various Forms.

(a) Even amongst savages we find some form of Division of Labour. In the illustration given on page 8 we noticed that a certain specialization began at quite an early stage in economic development.

The taking up by certain people of particular industries, such as spear-making and canoe building, is a good example of this. The assignment of separate duties to men and to women, or of special functions to the king, to the warriors, to the priests, to the medicine man, thus giving rise to certain social classes, are further examples from primitive society.

As the household by degrees ceases to provide for its wants by means of its own efforts, we get a further marking off of classes, the farmer, the craftsman, the trader, tending to become distinct, until we arrive at a state of things, such as exists at the present day, in which each has his own trade, business or profession.

(b) The illustration just given of the cattle, the leather and the boots, suggests another aspect of the Division of Labour, viz. a **division** of the work into **processes**, each complete in itself; the produce of one set of producers can be sold to another and utilized by them, the finished product of the one set provides the material on which the other works. It is not so long ago that in some parts of England all such processes were carried out on the same farm and probably by the same persons. To vary the illustration, in some parts of Europe to-day the clothes needed by the family are

entirely produced by its members. The sheep and the flax plant provide the raw material, woollen and linen thread are spun, cloth is woven, garments are made. Such a condition of industrial society is however rapidly disappearing, and people tend more and more to confine themselves to some one particular process of industry.

(c) With the introduction of the factory system a still further division of labour became general, viz. the **sub-division of processes**¹. Adam Smith's example of the pin has become classical; so it will be as well to quote him at length:—

“To take an example, therefore, from a very trifling manufacture, but one in which the division of labour has been very often taken notice of, the trade of a pin-maker: a workman not educated to this business (which the division of labour has rendered a distinct trade), nor acquainted with the use of the machinery employed in it (to the invention of which the same division of labour has probably given occasion), could scarce, perhaps, with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now carried on, not only the whole work is a peculiar trade, but it is divided into a number of branches, of which the greater part are likewise peculiar trades. One man draws out the wire; another straightens it; a third cuts it; a fourth points it; a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a peculiar business; to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making a pin is, in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind, where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently accommodated with the

¹ Under this system the members of an industrial group have different parts of the process assigned to them. The work of each is merely a contribution to some joint result, from which it cannot be separated and apart from which it can have no existence or value.

necessary machinery, they could, when they exerted themselves, make among them about twelve pounds of pins in a day. There are in a pound upwards of four thousand pins of a middling size. Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had all wrought separately and independently, and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day; that is, certainly, not the two hundred and fortieth, perhaps not the four thousand eight hundredth, part of what they are at present capable of performing, in consequence of a proper division and combination of their different operations."

In Adam Smith's day the use of machinery was in its infancy, since then its extended use has made this subdivision of processes infinitely more minute. In a modern pin factory there are many more processes than those mentioned by Adam Smith, and the average output per man instead of being almost 5000 pins is probably not far short of 15 millions, that is each man's work to-day results in the production of about 3000 times as many pins as it did 140 years ago.

Many similar examples could be given. At the present time boots are often made by hand and in some cases a single workman may do all the work himself, but for the most part boots are made in factories. The work is then divided up into many separate processes, each involving the use of a special type of machine. A worker becomes expert in a particular process and would probably be unable to take up efficiently any one of the others. As a consequence the output of boots from the factory is many times as great per man as that of the man working by himself.

(d) There is one other form of Division of Labour to which reference must be made. The localization of an

industry in some particular district or place is often called the **territorial division of labour**. For example the Cotton Industry has become localized in Lancashire, and the Woollen in the West Riding of Yorkshire. In the same way newspaper offices are to be found in Fleet Street and banks in Lombard Street, while doctors congregate in Harley Street and corn-merchants in Mark Lane. To call this "Division of Labour" seems hardly appropriate, but as this grouping together of people in the same business or profession seems to a certain extent to render more productive the services of the individuals concerned, there is sufficient resemblance to Division of Labour, properly so-called, to justify the use of the term.

We have now distinguished between **four forms of Division of Labour**:—

- (1) The division into **trades and professions**.
- (2) The division into **complete processes**.
- (3) The division into **incomplete processes**.
- (4) The division into **districts suited to particular industries**.

Whether we call the process just described Combination of Labour or Division of Labour is immaterial. It depends entirely on one's point of view. If we look at it from the side of the individual workers we regard them as consciously or unconsciously combining to perform certain tasks or to achieve certain results. If on the other hand we look at it from the side of the organization of industry, we think of the employer as fixing his attention on the end of the industrial effort and then dividing up the work amongst those taking part in it, assigning to each that function which he or she is most capable of performing, and co-ordinating the efforts of all in such a way as to secure the best economic results.

The general results of the Division of Labour may be summed up as follows:—

- Greater *productivity* of labour:
- Greater *opportunities* for the use of capital:
- Greater *diversity* of occupation:
- Greater *need* for the peculiar *skill* of the *organizer*:
- Greater *output* at less cost.

In short, greater *efficiency* of productive effort.

3. Advantages.

The special ways in which Division of Labour contributes to efficiency of productive effort must next be noticed:—

(i) If a man works at one thing only, he is far more likely to do it well than if he works at a great many things in turn. "Jack of all trades, and master of none," often describes him in the latter case. Through Division of Labour, therefore, his skill and dexterity are greatly increased.

(ii) When a man does many kinds of work, as for example the 18th century craftsman did—for he was often farmer as well as craftsman—a great deal of time is wasted in passing from one occupation to another. The getting out and putting away of a new set of tools, the getting from one place of work to another, the fetching of material, etc., all take time which would be saved if a man stuck to one job, or to one kind of work.

(iii) As processes become more and more subdivided, they become simpler, until it is found possible for many of them to be done by a machine. The extended use of machinery is in this way closely connected with the Division of Labour.

(iv) The processes taken over by machines are often those demanding the greatest physical effort. Many, therefore, at the present day, are working less with their

bodies and more with their hands than they would have done if there had been less Division of Labour.

(v) The simpler the process, the easier it is to classify workers and to assign to each the task for which he or she is best fitted. In this way men, women and young people of both sexes will find employment suited to their varying degrees of strength and ability. This means a great saving of skill. If the labour were not thus divided, many a highly skilled worker would be spending a great part of his day doing that which could be done by someone far less skilled. But when specialization is established the skilled man can devote his energies entirely to the work he can do best, and a boy can be doing that which demands little more than attention and quickness.

(vi) The more the processes of an industry are sub-divided, the more closely do certain types of work resemble one another. This has the advantage of making it easier for a man to change over from one occupation to another of a somewhat similar character, thus avoiding part at least of that waste of skill which results when a man is forced by circumstances to take up another kind of work.

(vii) It was said by Adam Smith that "the invention of all those machines by which labour is so much facilitated and abridged, seems to have been originally owing to the division of labour." This is true not only with regard to the workers themselves but also with regard to those whose calling it is to design machinery and to be continually improving it. The example given by Adam Smith is perhaps hardly typical. He tells us that when engines were first used,

"A boy was constantly employed to open and shut alternately the communication between the boiler and the cylinder, according as the

piston either ascended or descended. One of those boys, who loved to play with his companions, observed that, by tying a string from the handle of the valve which opened this communication to another part of the machine, the valve would open and shut without his assistance, and leave him at liberty to divert himself with his play-fellows. One of the greatest improvements that has been made upon this machine, since it was first invented, was in this manner the discovery of a boy who wanted to save his own labour."

Many inventions have come from the daily watching of a machine and from the worker's practical knowledge of its construction and its movements. In some businesses the inventive faculty of the employees is stimulated by the offer of a reward for suggestions or inventions likely to prove useful. The Division of Labour also provides more scope for the inventiveness of the professional engineer. First of all there is a constant demand for machinery of all kinds, the slightest improvement in manufacturing processes being eagerly taken up. And secondly when machinery is in such general use and so highly specialized there is a much wider field for invention. Some make a special study of one kind of machinery, some of another and the enormous number of new patents applied for in a single year shows that this study results in the continuous improvement of mechanical aids to industry.

4. Disadvantages.

Some people are inclined to dwell more on the disadvantages which they consider have resulted from the Division of Labour than on its numerous advantages. These disadvantages may be classified as (a) *direct*, (b) *indirect*.

Direct disadvantages. It is frequently urged that:—

(1) When a worker instead of making an article complete in itself such as a watch or a pair of boots, spends all his days making one small part of it such as

the spring of the watch or the tongue of the boot, he is likely to become incapable of doing anything but that small part, and so, as a worker, to become less efficient.

(2) When a man only works at some small process he will not take the same interest in his work as when he is shaping or constructing some object which he knows will serve some purpose of use or enjoyment. His mind will tend to get narrow owing to the restricted character of his work.

(3) There is something monotonous in continually repeating some one operation such as feeding a printing machine with paper or passing logs through a steam saw-mill, and this monotony tends to intellectual dulness and therefore to inefficiency.

Indirect Disadvantages. The Division of Labour has brought with it the factory system. If different parts of the work are to be assigned to different workers, organization becomes necessary and this necessitates the gathering together of the workers in the mill or the factory. This very often means crowded towns and cities, life under unhealthy conditions, absence of personal contact between employers and employed, etc., etc.

That these disadvantages are inseparable from Division of Labour is denied by those who have given most thought to the subject. There is still a demand for manual dexterity, for intelligence and for resource. Work on the whole is lighter to-day and makes more demands on the mental faculties. The factory worker has as a rule wider interests than the agricultural labourer and more capacity for utilizing the hours of leisure. The Division of Labour has added considerably to the amount of satisfaction that can be obtained with a given effort so that its economic advantage is undoubted; and if we admit that the standard of living has been raised, the laboriousness of work

diminished, the opportunities of leading a fuller and wider life increased, the social advantages seem to be no less important than the economic.

The whole tendency of modern industrial life is towards specialization and towards increasing the result of productive effort. It must however be remembered that the test applied to industry is not—"Is the output large?" but "Does it pay?" There must be a demand for the goods produced or for the services to be rendered: people must be willing to pay a remunerative price for them. The lower the price of a thing, the greater as a rule is the demand for it. The Division of Labour tends to reduce the expenses of production and hence to reduce the price at which goods can profitably be sold. In this way demand is stimulated and the additional amount produced finds a market.

TABULAR SUMMARY OF CHAPTER VI.

Division of Labour

{ Trades and professions.
Complete processes.
Incomplete processes.
Localized industries.

LIBRARY OF
EWING CHRISTIAN COLLEGE
ALLAHABAD
Advantages

{ Increase of dexterity.
Saving of time.
Increased use of machinery.
Diminution of physical strain.
Saving of skill.
Breaking down of barriers
between employments.
Greater inventiveness and
more scope for invention.

Disadvantages	Direct	Less skill required to make the part than the whole. Narrowing influence of work. Monotony of work.
	Indirect	The evils of a factory system. Overcrowding in towns. Loss of personal relation between employer and employed.

CHAPTER VII

THE LARGE BUSINESS

"The typical unit of production is no longer a single family or a small group of persons working with a few cheap simple tools upon small quantities of material, but a compact and closely organized mass of labour composed of hundreds or thousands of individuals, co-operating with large quantities of expensive and intricate machinery, through which passes a continuous and mighty volume of raw material on its journey to the hands of the consuming public." J. A. HOBSON¹.

A VERY conspicuous feature of the economic life going on around us is that business undertakings now-a-days are so much larger than they used to be. This applies to every kind of business—to manufacturing and to mining, to shipping and other forms of transport, to banking, to wholesale trade and even to the retail business carried

¹ J. A. Hobson, an English economist, author of *Evolution of Modern Capitalism*, *Problems of Poverty*, *The Industrial System*, etc., etc.

on in our shops. Examples are not difficult to find. The shops perhaps provide us with the most familiar illustrations. Many tradesmen who used to keep only one class of commodities now offer for sale goods of many different kinds. At the present day, for instance, most drapers sell fancy goods, travelling trunks, furniture and even cricket bats or tennis rackets. In London and other great cities there are large retail businesses, often called Stores, where everything can be bought from a pin to a motor car, and where one may even find a restaurant and a barber's shop. Then again do we not notice as we pass along the streets how many businesses are branches of some large banking or trading company whose head offices, shops or factories are elsewhere? The same thing is to be noticed in the great manufacturing centres. In many places the small factory seems to be dying out. Private undertakings are being turned into Joint Stock Companies, more capital is being introduced, larger and more convenient works are being built. Industry and trade alike are on a larger scale.

For this development two main reasons may be given:—

1. Owing to the fierceness of competition in business and to the underselling which is one of its most conspicuous features, it becomes more and more difficult to make a living in a small way of business, hence in self-defence people are forced either to enlarge their scale of operations or to place their services and their capital at the disposal of newly formed companies.

2. The very conspicuous advantages of business on a large scale lead many people to embark upon it. They trust to their improved position relatively to other firms to secure such an amount of business as will make the enterprise a success.

The tendency towards **Large Scale Production** reaches its height in that combination of capital known as the **Trust**. In the Trust the advantages of the *large scale* are to be found in their most developed form, and if the public shared in these advantages in the form of reduced prices, this form of business would have much to recommend it. Unfortunately however, it often happens that the Trust is able to control the industry, to establish a monopoly, and thus to secure for itself the lion's share of the benefits.

The advantages of the **Large Scale Industry** may be summed up in the one phrase—saving of productive effort, that is, through it a given result can be obtained with less effort—or, in other words, at less cost. The large scale then is more economical, and the economy is effected in a great number of ways. The various forms of saving may be grouped under two heads:—

1. Those connected with the **working of the business**.
2. Those connected with the **attracting of customers**.

To make the distinction clear let us take the example of a Railway Company. The **working of the business** consists mainly:—

(a) In keeping in good order the permanent way, the railway stations, the rolling stock, etc.

(b) In providing for the proper conveyance of passengers and of goods.

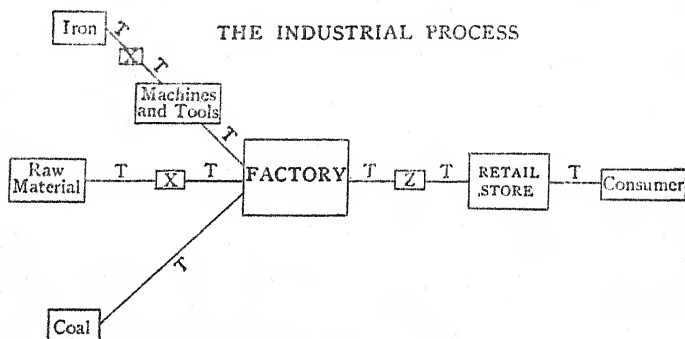
The **attracting of customers** is done:—

(a) By advertising as widely as possible the special advantages of the line, and the special attractions of the seaside and other resorts which it serves.

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(b) By offering special inducements at particular periods, such as the issuing of week-end tickets and the running of excursion trains.

The savings effected in these two departments vary considerably with the nature of the business. It will be convenient, therefore, to take two types of undertaking, viz. the factory, and the retail store, and see how each benefits by doing business on a large scale.



T=Transport agencies.

X=Intermediate stages, such as smelting of ore, spinning of cotton or wool, etc., etc.

Z=Wholesale dealers and other "middle-men."

The factory and the retail store are really only stages on the road which leads from the first productive effort (the getting of raw material, etc.) to the final satisfaction of the consumer's wants. The savings which can be effected at any given stage by means of large scale production depend not only on the organization of the effort at that stage but also on the conditions of production at the other stages and on facilities for transport. Thus the factory depends (a) on the producers of raw material, fuel, etc., (b) on the various distributing agencies, such as wholesale

dealers, retailers, transport agents, etc., (c) on the tastes, desires and means of purchase of the consumers.

This may be illustrated by the diagram on p. 70.

THE FACTORY.

The expenses of the factory may be roughly classified as:—

- | | |
|-------------------|--|
| (a) PREPARATORY | { raw material
fuel
machines and tools
transport |
| (b) MANUFACTURING | { in the engine room
in the workshops
in the packing department
in the office
removing waste |
| (c) DISTRIBUTING | { transport
agents and travellers
advertising |

Let us consider the savings which in the large business may be effected under each of these heads:—

Preparatory Expenses.

There is always an advantage to be obtained by buying in large quantities. The manufacturer whose consumption of raw material and fuel is very large can in this way effect great economies. The producer of the raw material or fuel is saved much time and trouble and he is willing to take a lower price. And similarly with the makers of machinery and tools; they are able to give some advantage to those manufacturers who place large orders with them.

The railway and steamship companies also quote lower rates for large consignments. It is much less trouble comparatively to handle large quantities than small. Time is in this way saved, and in business "Time is money."

Manufacturing Expenses.

The most considerable of the economies connected with the large scale of production are effected in the *factory* itself. Here the advantages of the Division of Labour are most conspicuous.

To begin with the **Engine Room**. In most cases doubling the amount of machinery in use would not necessarily mean doubling the plant, or doubling the number of engineers employed. The engines would be more powerful, but there would probably be a saving in cost of upkeep and a saving of power.

In the **Workshops** Division of Labour would be carried to a much greater extent, organization would be more effective and more complete, more machinery would be introduced, the work would tend to become more specialized. Machines which in the small business would only be in occasional use, would in the large be running all day. Processes would become more sub-divided. More economical arrangements could be made for supplying the workers with material and for taking away finished work. Again the large factory is more likely to be up-to-date in its methods. It has greater command of capital and so can more easily introduce improvements or replace an old machine with one of newest type. Lastly, in the large factory it is possible to make experiments which it would be too costly for a small business to undertake; experiments with a view to the improvement of processes, to the introduction of new designs and patterns, to the opening up of new departments.

A large scale makes possible great improvements in

the **Packing Department**. To pack ten cases of a particular kind of goods at one time does not take so long as to pack the same number of cases at different times. But this is not the only advantage. The large business makes its own cases. It is worth while having special machinery for this. In large chocolate works for example, all the cardboard boxes, tins, and packing cases, are made on the premises by machinery. A printing department is also added for the printing of the illustrated booklets, of cards and of wrappers. Here again is a great saving of cost and great additional convenience which would not be possible on a small scale.

In the **Office**, again, we find that the large scale means improved organization and methods. The work of the clerks is more specialized. The more efficient can devote their time exclusively to tasks which demand the full exercise of their skill and intelligence. The more mechanical parts of the work such as adding up long columns of figures may even be done by a machine.

Thus in all four departments great savings are effected, but there is a further advantage of the large scale which must not be omitted, viz. the utilization of **waste products**. The large business not only results in less waste but it also leads to the putting to some productive use of that which before cost large sums of money to remove and to destroy. Let us take an example from a steel tube factory. When the tubes are to be galvanized they are first of all put into a large bath of hydrochloric acid to remove any rust there may be on them, then they are transferred to another bath to be galvanized. At the bottom of each of these baths there collects a considerable amount of sediment, which from time to time must be removed. In the first bath it is for the most part ferric oxide or rust. In the second it is a compound containing zinc. When the business is on a very great scale, instead of carting away the sediment

and paying for it to be destroyed, subsidiary industries are started in which it can be utilized. The deposit in the acid bath is used in the manufacture of red paint, from the deposit in the other pure zinc is obtained.

Distributing Expenses.

We now turn to those expenses which are incurred in connection with the **marketing** of the produce. When the goods are made they must be distributed to the consumers whose wants they were from the beginning destined to supply. But between the factory and the consumer there are often many groups of persons through whose hands the goods must pass. If these various distributing agencies are also doing business on a large scale the cost of transferring the goods from the factory to the consumer may be largely reduced. It is owing to the large operations of steamship, railroad and other companies that at the present day wheat can be bought so cheaply from distant parts of the globe and that manufacturers in America can sell their goods so cheaply in England.

For the moment, however, we must concentrate our attention on the saving in distributing expenses which comes from the manufacturer's own large scale of industry, and not merely from that of the distributing agencies. Owing to the fact that he sends large quantities of goods at a time he effects a saving in the cost of carriage from the works to the wholesale merchant, to the retailer or to the consumer. The cost of conveying the goods to the market often prevents a manufacturer from effecting a sale. He has to compete with others who are less distant than he is and whose transport expenses are consequently less. The large scale producer is often in a position to effect a saving in this direction. He is sending so many goods to a certain place that it is worth his while to have railway trucks of his own which can be loaded up in the works,

taken by his own engine to the nearest goods siding and there attached to the train. His consignments are so large that he gets specially reduced rates for conveyance by land or by sea. Thus the size of his business enables him to compete successfully even in the most distant markets.

Under this heading of *distributing expenses* come also all the costs incurred in connection with what was called at the beginning of this chapter, "the attracting of customers." These are for the most part connected with (a) **agents and travellers**, and (b) **advertising**.

It is through the **commercial traveller** that manufacturers secure a market for their goods. There is so much competition at the present day, that it is not sufficient for the goods to have a good reputation, they must be pressed upon the retailers who are going to sell them. Those who do not ask for orders, seldom get them.

In this matter of travellers the large scale business has a distinct advantage. The smaller the business the larger must be the area covered by the traveller. He sells a little in one town and a little in another, and a great part of his time is spent on journeys. But if the business is large, the man's time may be occupied in a single district. Besides it does not take any more time to book a large order than a small one, so that the expense is distributed over a much larger business surface. It should also be noticed that the large business can secure the services of the men most skilled in the art of selling and best acquainted with the special features of the trade and with the requirements of customers.

The traveller brings the goods to the notice of the retailer and secures orders from him, but **advertising** brings them to the notice of the general public, that is of those who will purchase them from the retailer. What the public demands, the retailer must supply. Here again the advantage is with the large producer. In the first

place certain forms of advertisement are so costly that they can only be undertaken by those whose scale of business is a large one. That it pays to advertise in this way is generally admitted. Secondly, the larger the business, the less is the cost of advertising per unit of output, for the cost must be spread over all the sales that can be said to result from the advertising.

THE RETAIL STORE.

The advantages which the **large retail store** has over the small shop are in some respects similar to those just described. The large store buys cheaper and gets special rates for the carriage of goods; it economizes in the packing room and in the office; it delivers its wares to the customer at less cost; it can afford to advertise extensively. In addition there are certain advantages peculiar to the large retail business. It is evident that the small grocer, for example, is bound to keep in stock a very large number of articles even though his customers very seldom ask for them. He suffers therefore from three disadvantages—he needs a capital large in proportion to his business, a great portion of his capital is lying idle, his goods often suffer in quality from being so long unsold. The large store, on the other hand, can afford to keep a much larger selection of goods, while in proportion to the amount of business done the stock kept is comparatively small. For instance, the store might sell 100 times as many goods in the course of a year as the small shop does, but it would not keep 100 times as much stock. It replenishes the stock as fast as it is exhausted. Thus, comparatively speaking, the large store (*a*) has a larger selection, (*b*) keeps a smaller stock, (*c*) turns over its capital more frequently, (*d*) has fresher goods, (*e*) (if the articles sold are subject to changes of fashion) is able to follow the fashions more closely and to make a more attractive display of the latest novelties.

What is the combined result of all these advantages? The answer must be brief.

(1) The large scale business produces at less cost than its smaller rivals. It can as a rule therefore undersell them and in many cases it crushes them out of existence altogether.

(2) The reduction in working expenses really means that more is obtained with less effort. As this is often followed by a reduction of price, it is an advantage to those who buy the goods¹, but not necessarily to those who make them.

(3) The earnings per cent. of capital may or may not be larger, but the large scale tends to the accumulation of large amounts of capital in few hands and thus to the amassing of large fortunes.

(4) The large scale demands great skill in organization and thus gives rise to a highly salaried class of business organizers.

If there are such great advantages to be derived from a large scale of production and if, as it seems, the larger the scale the greater the advantage, then it may reasonably be asked—"Is there any limit at all to the size of a business?" The answer is, "Yes, there are limits"—and these limits are briefly speaking three in number.

1. Certain types of business are more successful on a small scale than on a large.

2. An increase in the scale of production is sometimes followed by a less than proportionate return.

3. The Division of Labour, as Adam Smith tells us, is limited by the extent of the market.

¹ Reduction of price depends on the amount of competition. If the business is so large as to give its proprietors a monopoly, the price may even be raised, in spite of the reduction of cost to the producers.

With regard to the **first limitation**, the tailor's business will serve as an excellent example. In this line of business success depends on meeting the wishes and requirements of each individual customer. If the business gets too large this personal relation is lost and customers fall off. The wholesale clothier may have an enormous business, but the clothes he turns out are ready-made, they are for people in general—he caters for classes and not for individuals. In other businesses perhaps the personal skill of the worker is the conspicuous feature. There is little opportunity for the introduction of machinery or for Division of Labour. Or again it may be that the success of an undertaking depends on the personal attention of the employer to every detail. The "master's eye" needs to be everywhere or failure results. In such cases as these the scale of production is always likely to be comparatively small.

The **second limitation** needs very careful discussion. Many economic writers have stated a **law of diminishing returns** which is supposed to apply to agriculture and mining, i.e. to what are called *extractive* industries, and a **law of increasing returns** which is supposed to apply to manufactures.

These two laws may be stated as follows:—

1. If additional amounts of capital and labour were applied to any given piece of land, a point would be reached beyond which any fresh applications of capital and labour would result in a less than proportional return. That is to say—Returns would be **diminishing**.
2. In manufactures the application of additional labour and capital would as a rule be followed by a more than proportional increase of output. That is to say—Returns would be **increasing**.

These laws need to be examined a little more closely.

1. A farmer is cultivating a small plot of land, doing all the work himself and putting very little into it in the way of manure, etc. His returns are 10 bushels of wheat to the acre. But he changes his method of cultivation. He employs a man to help him and he improves the soil by applying twice as much capital to it. Instead of getting 10 bushels of wheat he now gets 25. His returns are increasing. He is therefore encouraged to take on a second man and to further increase the amount of capital used with the result that the land now yields 36 bushels. He continues to farm more intensively, as it is called. He adds another man and still more capital and gets a crop of 45 bushels. It is evident that the last two additions are not so remunerative as the first and that when more than two men are at work on the land the returns diminish in proportion to the effort expended.

With 1 unit of labour and capital	Crop=10 bushels	an average of 10
" 2 units " "	" 25 " "	" 12½
" 3 " "	" 36 " "	" 12
" 4 " "	" 45 " "	" 11½

We must remember however that these conditions are not fixed. Improvements in farming may be introduced which would tend to push further off the point at which the returns begin to diminish.

2. In the factory, however, things seem to tend in the opposite direction. An increase of labour and capital brings in the advantages of Division of Labour and large scale production which have already been fully described. The output is likely to increase more than in proportion to the additional amount of capital and labour employed.

So far it appears as if there were one law for agriculture and one for manufactures, returns tending to diminish in the one type of industry and to increase in the other. But this is not really the case, and the earlier writers were

wrong in drawing this line of division between them. As a matter of fact both are illustrations of the working of one and the same law, viz. **the law of productivity of industrial effort.** It was stated in Chapter V that productivity depends partly on the efficiency of the requirements of production individually, and partly on the way these requirements are combined in making the industrial effort. Increasing and diminishing returns are other words for more or less productivity in proportion to increased effort; but productivity is here regarded as dependent on the way in which the requirements are combined. If the business organizer is to combine the factors of production in such a way as to secure the best results, he must be able to alter at will the relative amounts employed. He may think it desirable to add more Capital, more Labour, or more of Nature's Gifts such as land or motive power, but if any one of these, say Land, is for the time being a fixed quantity, he has not full control and so cannot secure the best results.

In agriculture we may assume for example that the best results would be obtained by applying to a certain field of 10 acres, 10 units of Labour and 20 units of Capital. If the farmer could double the amount of all three he would get at least as good returns in proportion, but let us suppose that he cannot get more Land, and so tries to get more produce out of the 10 acres by increasing the amounts of Labour and of Capital to 15 and 30 respectively. Since 10, 10, 20 was the best possible combination, it is easily seen that 10, 15, 30 is not so good and that hence the returns will be less in proportion.

Or take an example from a manufacturer. The organizer with an output of 100 tons a month finds that Natural Forces, Labour and Capital in the proportion of 5, 15, 20, will give him the best results. His business increases and he can sell 200 tons a month. He therefore

increases his factors to 10, 30, 40, and he finds that not only does he still maintain the best combination and so double his output, but he gets the advantages of the larger scale of production and more than doubles it. His returns therefore are increasing.

Or a further example might be given in which the increase in the scale of the industry resulted in neither increasing nor decreasing, but in constant returns.

To repeat then what has been already said. Whether the returns are increasing, decreasing, or constant, is a question of the comparative degree of productivity of the industrial effort made under different conditions, and this depends on the extent to which the organizer can control all the requirements of that effort.

In this argument we have taken the amount of output relative to the effort expended as the test of productivity. But there is another side to the question. It is of great importance that the expenses of production should be as little as possible, but it is also important that the goods produced should be sold at such a price as to remunerate adequately the services of all those who have helped in the production. Those services are rendered in order to secure an income; the productivity of the business is ultimately measured by the incomes derived from it.

This brings us to the **third limitation**, viz. the extent of the market. It is possible that from increasing the size of a business, a great saving of cost per unit of output may result, and a far larger amount of goods may be turned out with a given effort. But the goods are made to be sold and unless they can be sold at a remunerative price, it is no use making them. The reduction of the cost due to the increase in scale often tempts many more people to buy, so that the additional output does in fact find a market, but where this is not the case an increase of scale is impossible. If, for example, a woollen manufacturer found that

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by making 5000 yards of cloth he could afford to sell it at 3/- a yard

"	10,000	"	"	"	"	2/6	"
"	20,000	"	"	"	"	2/-	"

his scale of production would depend on his being able to sell the given number of yards at the given price. Let us suppose that at 3s. he could sell 4000, at 2s. 6d. 10,000, and at 2s. 18,000. He would not under these circumstances increase his scale to 20,000 because he could not sell that amount with a profit.

In earlier times when producers sold their goods only in their immediate neighbourhood, the market was very narrow and the scale of production very small. But at the present day with our highly developed means of transport, with easy communication by post, telegraph and telephone; with our banking system and our various forms of commercial machinery; producers find a market in the most distant places and the possibilities of increasing the size of their business are enormously increased.

CHAPTER VIII

THE HISTORY OF PRODUCTIVE EFFORT

"The history of industry and commerce is only the story of the various ways in which human resources have been applied so as to satisfy constantly developing human wants." CUNNINGHAM¹.

THE last five chapters have been devoted to a consideration of the various aspects of *productive effort*. In them it has frequently been stated that this effort is made because people have wants and that through effort wants are satisfied; also that since under modern conditions the result of effort is expressed in terms of a money income, **productive effort may be regarded as the source of income.**

¹ See footnote to page 42.

At different periods in a nation's history the productive effort has been made under very different conditions and has therefore assumed various forms. There has been a continuous development in economic life from the simple habits of the primitive tribe to the complex organization of a modern industrial community. Abundant illustration of this can be found in the industrial history of the English people. Down to the end of the 18th century the predominant economic idea seems to have been **Self-sufficiency**, that is, the provision by each social unit of that which was required to satisfy its own economic needs. When there was little communication and people lived in isolated groups the self-supporting unit was a very small one, but as time went on this unit always tended to increase. In early Anglo-Saxon days each **household** aimed at self-sufficiency, later each **manor** and **town** had before it the same ideal, and finally, when a more national sense was developed, and the policy of the country was to further national interests, the prevailing idea was that the **country** was one large unit which economically ought to be independent and self-sufficient.

With the 19th century came a very different conception. The unit was to be the whole **world**. In each country or district should be produced that for which the physical or other conditions seemed best suited, and the products of each country should be freely exchanged for those of every other. Thus, it was urged, as a result of the territorial Division of Labour, the world's production of wealth would, under the existing conditions of industrial skill and knowledge, reach its greatest possible extent. Such a policy, however, did not sufficiently take into account national aims and national ambitions. There has in consequence been something of the nature of a reaction against this extreme point of view, and at the present day there are signs of a tendency in the direction of a revival

of the idea of **National Self-sufficiency**. But, it should be noticed that the term has now a somewhat different meaning. In earlier times it implied the provision by the community of all that was needed to supply its wants, foreign trade being encouraged only because it brought things that could not be produced at home, while it provided additional markets for home products. Now the self-sufficiency aimed at is mainly political in its character for it means independence, so far as it is possible, of foreign countries in the matter of (a) food, (b) munitions of war (including coal). In many countries, however, the national policy has, besides, more definite social and economic ends—such, for example, as the encouragement of those industries (a) which tend to promote a strong and healthy population (e.g. agriculture), or (b) which work up raw material (e.g. timber or iron-ore) produced in the country itself.

In this chapter, however, we are concerned not so much with economic policy as with economic effort and the forms it has taken at different periods, so that economic policy will only be brought in when it exerts some special influence on industrial life. The gradual development of the self-sufficient unit from the **household** to the **nation** will be traced in outline, and the causes and nature of the successive changes will be briefly explained.

The Household.

The first English settlers in this country, who began coming over from the North of Germany about the middle of the 5th century, followed in their new home, so far as we know, the habits of life to which they were accustomed. They seem to have had a great aversion to towns. They were agriculturists living in small village groups. Their wants were few and these could be satisfied no doubt by their own direct effort. At this early date each household was for the most part self-supporting; it grew its own food

and for shelter, furniture, implements, clothes or ornaments it depended on the industry and skill of its own members. A type of industrial society not very unlike this, may still be found in some parts of Europe, though it is rapidly disappearing. In Sweden, for example, the Dalecarlian peasant is practically self-supporting. He is a peasant proprietor owning some few acres of agricultural land in the valley, enough pasture for his cattle on the hill-side or Saeter, and certain timber rights in the neighbouring forest. In the summer the women work on the farm, the girls and boys look after the cattle on the Saeter, the men cut timber in the forest. In the long winter evenings the women and girls spin and weave, make clothes and quilts and rugs, while the men and boys make furniture and household utensils and repair the tools and implements required on the farm.

The Village.

In an early stage of society the relation between want and effort is clearly reflected in the social and industrial life of the people. Some tribes are pastoral, others are agricultural. According as they are keepers of flocks and herds or tillers of the soil, so will be the type of village group in which they will settle. The English village with which we are generally familiar, with its cottages and homesteads near to one another, lining the village street or surrounding the village green, was the most convenient form of settlement for an agricultural people cultivating in common the wide stretch of arable land which surrounded the village; each cultivator having assigned to him several scattered strips of land, the produce of which was his own peculiar property. If, however, the community happened to be a pastoral one, we should probably find a different type of village. The homesteads would be scattered, because each would be situated on the particular piece of land where the cattle and sheep of the occupier were accustomed to

graze¹. Thus the origin of the two types of village, the compact and the scattered, may be traced to economic needs and economic habits of life.

The Town.

From the *village* we must pass to the *town*. The distinguishing feature of the early village life was that each household was self-sufficient, it provided entirely for its own needs. But in the town we shall find a community in which the members are working mainly if not entirely to supply the wants of others, and thus indirectly to supply their own. This will become more evident when we have considered the causes which led Englishmen to exchange the free and open life of the country for the more restricted life of the town. In one aspect the early town was little more than a large village of which the residential part was enclosed by some kind of protection such as a wall or a stockade, the arable and pasture lands lying round it on the outside. The need of defence against possible attack was no doubt a general reason for living in such fortified places, in fact town-life in England is said to date from the time of the Danish Conquest. But in another aspect the town is an economic unit of a different type altogether from the village. The origin of towns has been traced to many different causes. In one case it may have been due to the establishment of a military post; in another to the existence of some centre of religious life such as a monastery, a cathedral, or a shrine; in a third to the meeting of traders at some spot geographically convenient, e.g. on the sea-coast, on the estuary of a river, at the intersection of two main roads, or at a ford where a main road intersects a navigable river. But in every case there is one underlying economic characteristic, viz. the gathering together of people,

¹ This type of village is more usual in the Celtic parts of England such as Cumberland and Cornwall, also in the western parts of Yorkshire, in Wales and in Ireland.

such as soldiers, monks, priests, pilgrims, worshippers, traders, who are not self-supporting, that is who do not produce for themselves the food, clothes, etc., that they need, and so become dependent on the work of others. Round them will gather a community by whose efforts they will be fed. There will be an interchange of services and a specialization of functions. The service of some will be to fight, to pray, or to bring goods from a distant part, the service of others will be to cultivate the soil and to practise the crafts which will supply the simple needs of the whole community. Though the individual members of this town community are not economically self-sufficient, the town as a whole is. The two main differences at first then between the economic life of the village and that of the town are (1) in the latter case the self-sufficing unit is larger, (2) the members of the town community become dependent on one another for the necessities and conveniences of life.

The Manor.

A similar change will in time take place in the village itself. For defence against outside attack the weaker members of the community will begin to rely on some powerful neighbour who in time becomes their lord. He is a wealthy man and he has many wants but he does not satisfy them directly with his own effort. He will defend the inhabitants of the village and they will cultivate his fields for him. A new organization, therefore, springs up in the village, the essential feature of which is the relation of lord and tenants. The **manor**, as it is now called, becomes the unit of economic life instead of the household. The demands on the productive capacity of the manor become greater as civilization develops, and after a time a certain amount of specialization takes place. The **smith** is probably one of the first to find that his skill is in general

demand and that his time can most profitably be spent at the anvil. Later on perhaps the wheelwright and the miller will specialize on their own particular work, and their example will be followed by others. For a long time no doubt the craftsman will spend a part of his day in cultivating his fields, but ultimately his craft will absorb the whole of his time. By degrees, however, life will tend to become more luxurious, and the more well-to-do will want things which the manor cannot produce. To satisfy these needs therefore they will have to produce more food or wool than they will themselves consume, to sell the surplus at the neighbouring town and to buy of the pedlar who goes from house to house, or of the merchant in the town, the foreign wares that they cannot otherwise obtain. The main results of all this will be that the manor will gradually cease to be self-sufficient, the relation of its various members to the lord will undergo a change, and its importance will begin to decline.

A few words must be said about the industrial life of the manor. The community consists of the lord and his tenants. The latter may be of different ranks—a few, perhaps, are free men, the rest are semi-servile. The majority are small farmers, they cannot leave the manor—they are so to speak tied to the soil—and they must do certain specified services for the lord. They may be divided roughly into two classes: (*a*) *villains*, holding about 30 acres, and (*b*) *cottars* holding about three to five acres. The lord holds the manor from some greater lord or from the King on condition of military service, but to all intents and purposes he may be said to own the land. A part of it called the *demesne* is cultivated by the tenants for the lord, and the produce of the *demesne* provides him with an income. The rest is cultivated by the tenants and forms their means of livelihood. The land of the manor is divided into three parts, the arable, the pasture and the waste. Every tenant

has so much arable and so much pasture allotted to him and he has grazing and other rights on the waste. The arable land, the open field as it is called, is divided into three large fields, two of which are cultivated each year, the third being left fallow. These three fields are divided up into a large number of strips, each measuring about an acre, separated from one another by banks of turf called baulks. Each member of the community, whether lord or tenant, has a certain number of these strips to cultivate according to his social rank. His strips do not join one another but are scattered over the three fields¹.

Two general principles seem to have regulated the size of a man's holding—(1) the villein should not have more land than he could cultivate in the time at his disposal, (2) he must be able to live on the produce of his holding. It was a practical application of the idea that for a man to live in those days two things were essential—(a) land, (b) time to cultivate it.

The cottar class presents some difficulties. The cottar has only three to five acres, and this would hardly provide him with the means of livelihood; besides, to cultivate this amount would take very little of his time. It may be supposed therefore that (1) he must have another source of income, and (2) his time is otherwise taken up. He is probably doing the more menial services for the lord for which he receives food or other payments in kind, or he may be doing services for the village, such as herding sheep or cattle, receiving in return from the other villagers a portion of their produce.

The Gild.

As the industrial life of the town develops, some form of organization becomes necessary, and this is provided by the gild. The tendency to separation of trades has gone

¹ A brief description of the *Open-field System* was given on page 47, but for the sake of completeness it is repeated here.

on apace as a consequence of an increased demand for articles of use and personal adornment. This demand will at first arise mainly with two classes in whose hands a certain amount of wealth has accumulated:

(1) the manorial lords whose sheep-runs or whose wide lands tilled by villein labour have yielded them a surplus produce which they can exchange for articles of luxury, etc.

(2) the Church which has acquired lands and is constantly receiving gifts of piety.

But by degrees many of the townsmen also will become rich and in consequence will have a higher standard of living. The industrial community soon finds itself in need of protection. Protection against the lords to whose exactions its members are exposed; protection against the competition of those of their fellow townsmen who would injure trade by selling articles of poor quality; protection against the foreigner, that is the trader from another town, who might undersell them in their own market. This need for protection brings into existence the Merchant Guild, which, once established, soon acquires freedom from the lords and control of local industry. The lords anxious to raise money for a Crusade or for some other enterprise readily give up their claims in exchange for the ready money of the gild, and the townspeople freed from exactions take advantage of the newly acquired security to improve their industry and to accumulate wealth.

As regards control of industry the policy of the gild was (a) internal, (b) external.

(a) None but members of the gild were allowed to engage in trade, and the gild regulated how the goods were to be made and under what conditions they were to be sold.

(b) The outsider was jealously excluded. If he wished to sell in the market of a particular town he must

pay special tolls and must conform to the market regulations. There was a very good reason for this: the citizens had paid a high price for their trade privileges and were naturally unwilling to share them with those who had contributed nothing.

At first the term *merchant* covered both craftsman and trader, for each man sold the wares that he had himself made, but the growing complexity of wants and the greater specialization of trades led to the emergence of a separate trading class to which in time the term *merchant* was more especially applied. This greater specialization further led to the formation of Craft Guilds—separate guilds for the supervision of particular trades and for the safe-guarding of the interests of those engaged in them. Thus a weavers' guild controlled the weaving of cloth; no one was allowed to carry on the industry who was not a member of the guild, and every member had to make and sell according to the prescribed rules.

It has been shown that the ideal of industrial life in the Middle Ages—whether on the manor or in the town—was local self-sufficiency. But forces were at work which tended to break down the barriers erected to preserve it. On the manor the desire of the lords to get the means of satisfying their more luxurious desires led to (a) the commutation of labour services for money payment with the subsequent disappearance of the villein, and the rise of two new classes—the tenant farmer and the free labourer; (b) the keeping of sheep for the sake of the wool, which led to the fencing in of portions of the waste and the withdrawing from the open fields of the lord's demesne land; thus enabling him to turn the greater part of his land into compact sheep runs¹. In this way two essential features

¹ This process is commonly known as "Enclosure." In the 15th and 16th centuries it was only going on over a very limited area. It was not till the 18th and 19th centuries that enclosure may be said to have become general.

of the manor—the relation between lord and villein and the system of open-field cultivation—began gradually to disappear and to give way to a new order of things.

In the town, interests tended to widen. Trade became national instead of local. National regulations began to override local ones. The guilds, no longer supreme, gradually declined in importance until they passed out of industrial life altogether. With the extension of trade beyond local boundaries a new industrial personage emerged, viz. the **Trader**. The trader was a *middle-man*; a connecting link between the *producer* and the *consumer*. Trading was a special form of productive effort and the wider the gap between the craftsman and the final purchaser of his wares, the greater did the importance of the trader become. He alone came into contact with the consumer, and he alone therefore could judge of the character and extent of the demand. The craftsman made what the trader was willing to buy and to a certain extent therefore became dependent on him.

State Regulation.

From the mediaeval conditions of manor and guild with their local organization and local self-sufficiency we pass by slow degrees to the **State regulation of industry and commerce**, to a policy known as **Mercantilism**, by which the industry and commerce of the country were used as a means of securing National Power, and the interests of the individual were subordinated to those of the country at large. Traces of a mercantilist policy may be seen as early as the 14th century, but economic changes in early times were very slow and it is not till the days of Elizabeth that we can say that the new order of things is completely established and that the type of industry which we associate with the manor and the guild has given place altogether to another.

In many respects the new type is not so very unlike the old, but its outlook is wider, it has ceased to be purely local, it has in itself possibilities of further development. The geographical discoveries of the 16th century and the colonization of the 17th open up new and more distant markets. Ports like London and Bristol become great centres of trade. New products are brought to them from far off lands, industry becomes more diversified and there is a great advance in industrial art.

Agriculture is in many parts still carried on according to the old system of the *Open-field*, and the manor is still there, but the conditions of country life are very different. The lord of the manor lets most if not all of his land to tenant farmers who pay him rent for it. But he is not the only landowner. A class of small landowners called Yeomen has arisen, whose standard of living is low, for they cannot obtain from their land much more than the bare necessities of life, yet their sturdy independence proved to be England's greatest source of strength, and their firmness and courage secured the victory on many a well-fought field. The parliamentary forces in the Civil War were largely composed of them, and the unbroken success of Cromwell's Ironsides is evidence of the stuff of which they were made. The 16th century had been a period of hardship for the small farmer, but in the 17th his position was considerably improved. The increase of wealth in the towns, due to the extension of trade and industry, meant a greater demand for agricultural produce, and the farmer had in addition another source of income in the handicraft which occupied a portion of his time. Every farmhouse had its looms, and the cloth thus produced found a ready sale on market day in the neighbouring towns.

The agricultural labourer was another important feature of the rural community. His wages were low, but he too

had other sources of income. He grazed his cow on the waste, he cultivated his little piece of garden ground, while the spinning wheel brought in a little ready money, for the yarn was much in demand for weaving.

In the towns the craftsman (who, especially in the smaller places, was often an agriculturist as well) followed his own particular calling, assisted by his apprentices and his journeymen. The craftsman had himself been through the preliminary stages of apprentice and journeyman. There was thus no class distinction between master and man. The youth was apprenticed for seven years to learn his trade. Then, as he was not yet considered to have arrived at years of discretion, and was in need of both experience and capital, he served for a few years as a journeyman or hired worker. In time he became a master craftsman, and set up in business for himself with apprentices and journeymen of his own.

This type of industry is known as the **Domestic**. Its characteristic feature is that it is **non-capitalistic**¹, that is, the craftsman is an independent producer; he works for his own customers, himself owning the necessary capital, e.g. the raw material and the tools; the finished product is his and he disposes of it as he will.

The Industrial Revolution.

But this state of things is not destined to last. Little by little the capitalist, that is the man whose accumulated wealth is employed in setting others to work, begins to appear. At first it is more in trade than in industry that he is needed. In the days of Elizabeth daring sailors like Drake and Raleigh had great schemes for adventurous voyages which were expected to result in enormous profit to those who took part in them. But very often these pioneers had not the means to fit out costly expeditions of

¹ Cunningham, *Growth of English Industry and Commerce*.

this kind, so wealthy noblemen and burghers, probably also the Queen herself, provided the necessary capital and thus became in a sense partners in the enterprise, running great risk of not seeing their capital again, and receiving as their reward a portion of the wealth brought home by those who were successful. By degrees the capitalist begins to figure also in industry. This is especially the case where the raw material is imported. The craftsman cannot purchase it in small quantities at his own door or even in his own neighbourhood, he must buy it in large quantities and of the merchant in the distant city. But he has very little ready money and so the capitalist comes to his aid. The capitalist buys the raw material and employs the craftsman to work it for him. Little by little he acquires control over the industry until the craftsman is to be found working on the capitalist's premises, using his tools and machinery and receiving a wage for the services he renders.

For a long time the change in industry from a non-capitalistic to a capitalistic form went on very slowly, but in the second half of the 18th century the pace was somewhat suddenly accelerated. So complete was the change effected in the course of a comparatively few years that the movement goes by the name of the **Industrial Revolution**.

The primary cause of the Industrial Revolution was, doubtless, the great extension of the market for British goods brought about by the colonial expansion which resulted from the successful wars with France and Spain. Whenever there is a known demand for a nation's products an effort is made to adjust the supply to that demand. But industrial methods were so backward that the output per man could not be increased to any appreciable extent. This was the opportunity for the inventor. In rapid succession one labour-saving device after another was introduced and the productive capacity of the nation as a whole was enormously increased.

One of the earliest industrial improvements was the discovery that coal could be used for smelting iron ore¹. At the beginning of the 18th century the **iron industry** was dying out because the forests which supplied the charcoal for smelting were rapidly disappearing. The fact that in England coal and iron are found in close proximity to one another contributed largely to the great development of the iron industry and to its establishment on the great coal fields. Thus when at a later date there was a great demand for machinery the improvements in iron manufacture made an adequate supply of it possible.

Great changes also took place in the **cotton industry**. The inventions of Hargreaves, Arkwright and Crompton introduced successively (a) the operating of many spindles at once by a single workman, (b) the use of water-power and the making of a stronger thread, (c) the making of a thread fine enough for muslins. In this way cotton thread was manufactured in very much larger quantities and of very much better quality. Spinning for a time was far in advance of weaving, but the latter process was improved by the invention of Cartwright's Power Loom in 1785. Steam-power was also substituted for water-power, and the mills, which had been built at first on the banks of the swifter rivers, were now built on the coal fields, giving rise to the crowded manufacturing towns of the Midlands, of Lancashire, and of the West Riding.

By degrees the use of machinery and of steam-power became general, until in most forms of manufacture the factory was the industrial type. The change meant greater division of labour, a larger scale of industry, more capital. But capital was just what the craftsman could not supply,

¹ The discovery is said to have been made by Dudley in the 17th century, but little use was made of it. Further experiments were made a century later with the result that coke was first used for the smelting of iron by Abraham Darby in 1735 at the Coalbrookdale Works in Shropshire.

so the capitalist employer came to be a necessity and the craftsman ceased to be an independent worker. Production was carried on in large industrial groups in which the work was controlled and directed by the business organizer.

The social results of the change cannot be dealt with here. It is sufficient to say that while the amount of material wealth produced was being rapidly increased, poverty and distress seemed to increase with it. The inability of many to adapt themselves to the new conditions, the great fluctuations in the demand for commodities and in the conditions of supply, together with the consequent irregularity of employment, resulted in great social evils, which in their turn called for special efforts on the part of the workers themselves and for special social legislation on the part of the Government.

A few words must also be said about the **changes in agriculture** which went on side by side with those taking place in manufacturing industry. A system which had answered very well when the object of farming was merely to get from the land the necessities of life proved quite unsuitable when the object was to make as large a profit as possible. Under the open field system improvement was impossible¹. All must cultivate the same crops and use the same methods. Improvement therefore necessitated enclosure. When each farmer in place of his scattered strips had a compact farm marked off from his neighbours by hedges or walls, scientific methods could be introduced into agriculture, and it was worth while to cultivate far more intensively and to apply capital to the land.

¹ "The drawbacks of this system were tolerably plain. Time was idly spent in passing from scattered strip to scattered strip. Drainage was a failure, if your neighbour did not drain his land as well. The use of new machinery was as little possible as the observance of a new "rotation"; and common rights of pasture over the stubble were a serious obstacle to winter crops." L. L. Price, *A Short History of English Commerce and Industry*.

The economic advantages of the new order of things were very marked. Crops were much heavier and there was greater variety of them. Land did not need to be left fallow and so the cultivable area was increased. Hitherto cattle had been kept chiefly for draught purposes and sheep for their wool, now both were regarded as sources of food supply. But the changes proved a great disadvantage to the small landowner or yeoman and to the agricultural labourer. The yeomen were for the most part an unprogressive class. They could not take readily to the new methods and they had very little capital; it was difficult for them therefore to compete with larger and more scientific farmers. Other causes, moreover, combined to bring about their ruin. The establishment of the factory system deprived them of their second source of income, viz. handicraft. The long wars with France brought great fluctuations of prices and heavy taxation. The increase of pauperism burdened them with excessive Poor Rates. As a result the yeomen found it impossible to pay their way and they were forced to sell their land to capitalist farmers who were only too glad to increase the size of their holdings. Large farming thus took the place of small and capitalism became a feature of agriculture just as it did of manufacturing industry.

The agricultural labourer suffered in a somewhat different way. The enclosure of the waste meant the loss of his free grazing and he was unable to keep the cow which had supplied him with milk, etc. He lost also his home industry, for spinning was now done in the mills. Thus his income was diminished just when, owing to the war, prices were extremely high. It often happened, therefore, that he migrated to the towns where the newly established industries created a demand for labour, and by degrees the population of England instead of being mainly rural and agricultural became to a large extent urban and manufacturing.

Thus the Industrial Revolution brought about great changes in the form and character of industrial effort in this country. It introduced a **capitalistic system** in which Capital and Labour are two clearly defined factors. As a consequence of it men are now working in large industrial groups, deriving their income from the produce of a highly organized effort which for the most part they only very partially comprehend, failing in many cases to realize the extent to which they have contributed to the result and the relation between the work done and the income received.

ECONOMIC SELF-SUFFICIENCY

LOCAL			EXTENSION OF TRADE	NATIONAL		
Household	Village	Manor		Small Farms	Capitalism	Large Farms
	Town	Gild		Domestic System		Factory System

BOOK III

BUYING AND SELLING

CHAPTER IX

THE CONDITIONS OF EXCHANGE

"On both sides of the exchange there are persons and there are commodities; and from one point of view each of the persons is a buyer, as he is a seller from another. He buys the goods of the other party, and he sells his own." L. L. PRICE¹.

AT this stage in the development of our subject it is necessary to go back for a moment to the account given in Chapter II of economic life in general. There it was suggested:—

- (1) that the central fact of economic life is *income*;
- (2) that man's economic effort is devoted to the getting of an income;
- (3) that under modern conditions such effort is indirect, for it is expended on objects which will not themselves satisfy the want which gave rise to the effort;
- (4) that men work in industrial groups and that the product of the effort must be sold before the wants of the individual members of it can be satisfied.

Sale and purchase, the process by which the result of effort can be expressed in terms of income is the subject of Book III. It will be divided into two chapters, one

¹ L. L. Price, M.A., Reader in Economic History in the University of Oxford, author of *Political Economy in England*, etc., etc.

dealing with the **principle** which underlies all exchange, the other with the **means or machinery** by which exchanges are effected.

Exchange by Barter.

Why, it may be asked at the outset, do people exchange things with one another? An answer to this will best be found by examining an instance of the simplest form of exchange, viz. **Barter**. One boy, *A*, has a knife which his friend *B* would like to possess, while *B* has a fishing-rod to which *A* has taken a fancy. Will they exchange? That depends on whether

1. *B* would rather have *A*'s knife than his own fishing-rod.
2. *A* would rather have *B*'s fishing-rod than his own knife.

If these conditions are both fulfilled, the knife is exchanged for the fishing-rod, and both *A* and *B* may be said to have gained by the transaction. Three things seemed to be necessary on each side of the transaction.

1. **A desire** for the thing owned by the other.
2. **A willingness** to make some sacrifice to obtain it.
3. **A comparison** between the satisfaction to be gained by possessing the thing desired and the satisfaction derived from the thing already possessed but which must be given up in order to get that which is desired.

Or looking at it for a moment from *A*'s point of view, these three things might be expressed thus:—

1. **Desire** to possess *B*'s fishing-rod.
2. **Willingness** to give *B* something for it.
3. **Comparison** between the satisfaction of getting *B*'s rod and the loss felt by parting with the knife.

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The power to satisfy want is in Economics called **Utility**, so it may be said that if an exchange is to take place *B*'s rod must have in *A*'s eyes a greater utility than his own knife, and *vice versa*.

As a result of comparing the two utilities

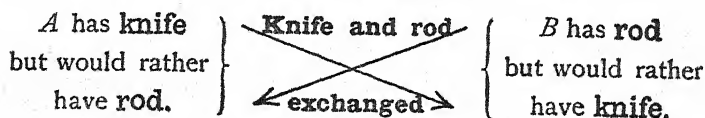
A considers that *B*'s rod is worth the sacrifice of the knife;

B considers that *A*'s knife is worth the sacrifice of the rod.

The one thing is therefore exchanged for the other.

The expression of the worth of the one thing in terms of the other for which it is exchanged is called its **Value**, and this idea of Value is the fundamental principle of all exchange, whether it be the exchange by two boys of one foreign stamp for another, or the exchange by two merchants of the one's goods for the other's money.

EXAMPLE I. Exchange by Barter.



Exchange by Sale and Purchase.

In the example given barter is possible because *A* and *B* each have exactly what the other wants¹, but in ordinary life such a method of exchange would prove extremely inconvenient. If, for example, farmer *A* had a horse but wanted to exchange it for several other things such as a coat, some chairs, some flour, and a gun, he would find it difficult to meet with anyone who had all these things and who was at the same time willing to take the horse in exchange for them. *E* has a gun but *A* will not give his horse for it and he cannot give him a part of the horse.

¹ There is in this case what is called a "double coincidence of want."

Other people have coats or furniture or food but *A* is unable to get them because he does not want as much of any one of these things as he would require in exchange for the horse. In order to get out of difficulties like this, money was introduced and now-a-days goods are generally exchanged for money, or at any rate what is paid for them is expressed in terms of money. It was stated just now that Value is the expression of the worth of a thing in terms of that for which it is exchanged, but as now-a-days things are exchanged for money, the value of a thing may be said to be the sum of money that would be paid for it, or in other words—its **Price**.

EXAMPLE II. Exchange by Sale and Purchase.

<p><i>A</i> has horse but wants coat, chairs, flour, gun.</p>	}	<p>SELLS FOR—£10—BUYS</p>	<p> <i>B</i>'s coat for £2. <i>C</i>'s chairs for £3. <i>D</i>'s flour for £1. <i>E</i>'s gun for £4 </p>
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By these various transactions *A* has received in exchange for his horse, a coat, some chairs, some flour and a gun. The value of the horse was £10 and this sum was exactly equal to the sum of the values of the goods purchased.

THE THEORY OF VALUE.

If we now understand what is meant by Value, we can go on to a further question—How is Value determined? In the example last given we supposed that the horse was sold for £10, the coat for £2, the chairs for £3, the flour for £1, and the gun for £4. Why did they fetch those exact sums? To answer this question requires some knowledge of the Theory of Value, so we must study this carefully before we go any further. The sale of *A*'s horse will serve as a useful illustration. We may assume that *A*

has use for a horse but that he would rather have the coat, chairs, flour and gun, if he could get all of these in exchange, i.e. if he could buy them with the money which he would get for the horse. We may also assume that *A* will not take less than a certain sum for the horse (for if he did he could not buy the coat, etc.), and that he will try and get as large a sum as possible. Looking at it from the seller's point of view we notice that

(a) he has a minimum or reserve price,

(b) he will get as much more than the minimum as he can.

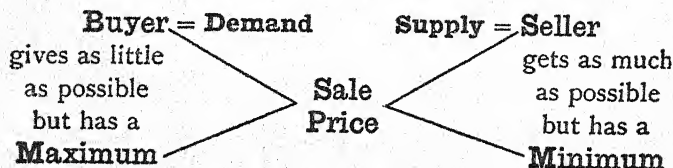
But he must find a customer, and if no one is willing to buy, that is, to pay the minimum price, there can be no sale. Further, people are only willing to buy when the thing offered is worth to them at least the price that is asked. Looking at it from the buyer's point of view we notice that

(a) he has a maximum price beyond which he will not go because the thing offered is not worth more to him,

(b) he will pay as much less than the maximum price as he possibly can.

There are then two sides to every bargain, the buyer's and the seller's, the former is spoken of as **Demand**, the latter as **Supply**¹.

EXAMPLE III. One Buyer and one Seller.



¹ The precise meaning given to these terms in Economics will be explained later on in this chapter.

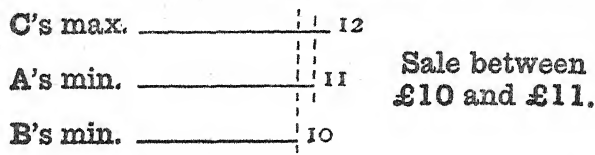
So far it has been shown that the highest possible price is the buyer's maximum and the lowest possible price is the seller's minimum, so that these two are the limits between which the actual price will be. If the maximum were £10 but the minimum were £12, there would be no sale. Whereas if the maximum were £12 and the minimum £10 the price could be either £10 or £12 or between £10 and £12.

1.	{	Buyer's max. _____	10	No sale.
		Seller's min. _____	12	
2.	{	Buyer's max. _____	12	Sale between £10 and £12.
		Seller's min. _____	10	

We have now found the limits, but what will decide the actual price? This depends on competition—on the relative bargaining strength of the two parties. Each tries to conceal from the other his limit price and the fact that he is anxious to buy or to sell as the case may be. If the seller really wants to sell and thinks that the buyer is indifferent, the price is likely to be nearer £10 than £12. If on the other hand the buyer is keen on getting the horse and thinks the seller will not part with it unless he gets a good price, the price is likely to be nearer £12 than £10. Thus the point between £10 and £12 at which the sale will actually take place will be fixed by (a) the desires, (b) the skill in bargaining, of the two parties.

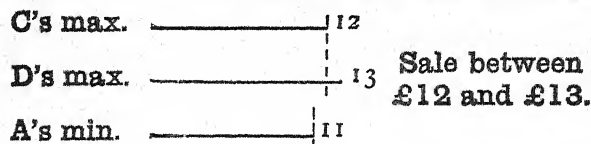
This example is the simplest that can be given because there is only one horse to be sold and only one buyer, but the principle will be the same in all cases. Let us vary the example a little.

EXAMPLE IV. One Buyer and two Sellers.



If *C* wanted to buy a horse and *A* and *B* each had one to sell, the maximum and minimum prices being those shown in the above diagram, the price would be affected by the competition between the two sellers. As there is but one buyer, and he wants only one horse, one of the sellers must be made to retire and that can only be done by forcing the price down below his minimum. In the example given the competition between *A* and *B* would force the price down below £11 and then *A* would retire. The price then will be below £11 but not less than £10. After *A* has retired the bargaining goes on between *B* and *C*, and according to their relative strength so will the price be in favour of one or the other.

EXAMPLE V. One Seller and two Buyers.



If *C* and *D* each wanted to buy a horse and there was only one for sale, viz. *A*'s, it is evident that *D* would be the buyer because he is willing to give for it more than *C* is prepared to pay. The competition between *C* and *D* would soon force the price up to just over £12 when *C* would retire. Now the bargaining will be between *A* and *D*. The price will be more than £12 but not more than £13; what it is exactly depends on the relative bargaining strength of *A* and *D*.

Demand. From these examples it can be seen that what really determines the value and the price is the working on one another of two forces, the one being the desire of the buyer to possess the thing in question, and the other the reluctance of the seller to part with it unless he can get what he considers a fair price for it. These two forces are commonly called **Demand** and **Supply**. The terms seem easy enough to understand, but as they are used in Economics in a very special and restricted sense, it is best to give some definition of them. A boy may see a very attractive looking cricket bat in a shop window, and may be very desirous of having it, but unless he has the money to buy it and is willing to pay the price asked, there is no demand. Demand then implies three things:—

- (1) **Desire** to possess a thing,
- (2) **Means** of purchasing it,
- (3) **Willingness** to use those means for purchasing it.

When we talk about the demand for anything, we mean the demand for it of people in general, the total demand. But this depends on the price asked, for we know very well that the willingness of people to buy a thing depends very much on what they have to pay for it; more or less will be demanded according to the price. **There is no such thing therefore as demand apart from price.** If we say, "There is a great demand for motor-cars," we mean that at the prices asked for various types of car people are buying freely. Or at some particular time it may be said that strawberries are in great demand, and that means that large numbers of people are willing to pay the price that is then being asked for the fruit.

For most commodities the demand varies with the price, that is to say the demand increases as the price falls and diminishes as the price rises. A thing is in demand

because it has power to satisfy wants, but all people have not the same wants nor have they the same means of satisfying them. The want cannot be satisfied unless an effort is made; and in the case of purchase the effort takes the form of paying the price necessary to induce the owner to part with the thing desired. The maximum price that anyone is willing to pay is determined by the utility of the thing to him. One man would give £1 for a thing for which another would not give more than 10s. Two men want to get to a place some little distance off. One would pay 2s. rather than walk, the other would not ride if he had to pay more than 2d. The one will probably take a cab, the other a tram. It can easily be understood that the demand for cabs will depend on the fare charged, and that if the tram fare were reduced to 1d., a large number of persons would ride who now walk. Very few people buy strawberries at 2s. 6d. a pound, but there is an enormous sale when the price has fallen to 6d. When demand is thus influenced by changes of price, it is said to be **elastic**. There are some things, however, the demand for which remains very much the same even if the price is altered. Those people, for example, who now buy all the bread they can possibly want would not buy much more if bread were cheaper, nor would the consumption of salt be much greater than it is if the price of salt were reduced, or much less if the price were raised. In such cases the demand is said to be **inelastic**.

Business men notice very carefully the varying conditions of Demand, and their success largely depends on not offering more goods at a certain price than will find a sale. It is possible to draw up what is called a **Demand Schedule**, that is a table showing the amount that would be demanded at each possible price. For instance, a manufacturer is proposing to make a certain type of

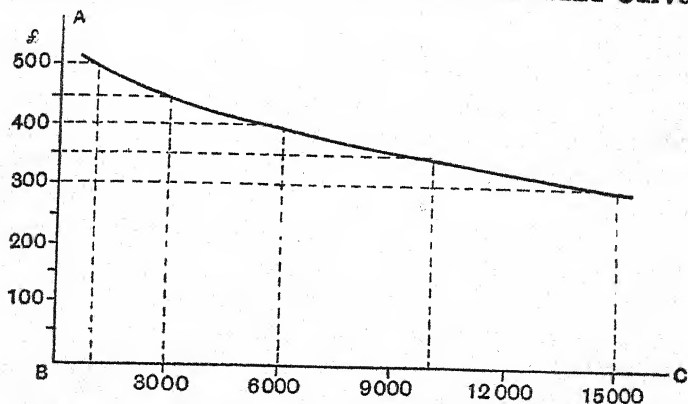
motor-car, so he works out to the best of his ability the number of cars he would be likely to sell according to the price he asks for them. His table might be something like this:—

If price were	£500	annual demand would =	100
"	"	£450	" " " = 300
"	"	£400	" " " = 600
"	"	£350	" " " = 1000
"	"	£300	" " " = 1500

and so on.

If his sale represents $\frac{1}{10}$ of the total amount of such cars that would be sold, by adding a '0' to the above numbers we shall get the total annual demand.

This Elasticity of Demand can also be shown diagrammatically by means of what is called a **Demand Curve**.



The vertical line *AB* is marked in units of price. The horizontal line *BC* is marked in units of quantity sold.

Opposite to each price and vertically over the corresponding quantity that would be sold at that price according to the table, a dot is put. Through the dots a curve is then drawn. If a line is now drawn through any point in *AB* parallel to *BC* and from the point where it intersects the

curve a line is drawn perpendicular to BC , the amount that would be sold at any given price is at once clearly seen.

Supply. We must now turn to the question of Supply. Just as we had to be careful to distinguish between *desire* and *demand*, so we must be careful to distinguish between *stock* and *supply*. The stock is the quantity of goods that could be sold, the supply is the quantity that would be sold at a given price. In Example IV, the stock of horses was two. At £11 the supply would also have been two, but between £10 and £11 the supply would have been one and below £10 it would have been none. **There is no such thing then as supply apart from price.**

We have seen that the buyer's maximum price is determined by (a) his desires, (b) his means of purchase, but what determines the minimum price that the seller will take? In the first place we must assume that the seller is a business man who does not value his goods for the use he can make of them, but only for what they will fetch. He wants to part with them, but he will not part with them at a loss. If he is a *manufacturer*, he has had what are called expenses of production. He has had to pay for buildings, for keeping up his machinery, for raw material, etc., and he has had to pay salaries and wages. If he is a *merchant* or *tradesman*, he has had to pay for the goods he is going to sell and he has had his working expenses as well. In either case he has had to give his own time, skill and effort to the business in question. It is evident then that the lowest price he can afford to take is that which will repay all his expenses and provide him with an income. Such a price is generally called *cost price*, and it is the seller's minimum.

Like Demand, Supply is affected by price—though in the opposite direction. The higher the price the more are people as a rule willing to sell, and *vice versa*. If the

supply quickly responds to changes of price it is said to be **elastic**, if it responds slowly or does not respond at all it is said to be **inelastic**. The supply of most manufactured articles may be considered elastic because if the price rose many would manufacture who do not now do so, and if the price fell many would cease to manufacture. This, however, takes time, so it is usual to say that at any given moment supply is more or less inelastic according to the amount of goods in stock, but that if time is allowed the supply of such goods is elastic because more can be produced within the time that people are willing to wait for them. This, however, is not quite the case with agricultural products. If the world's wheat harvest is scanty, the price of wheat is likely to go up, but there will be no more wheat till next harvest, and the want of bread is urgent, so that the supply of wheat and other fruits of the earth may be said to be inelastic.

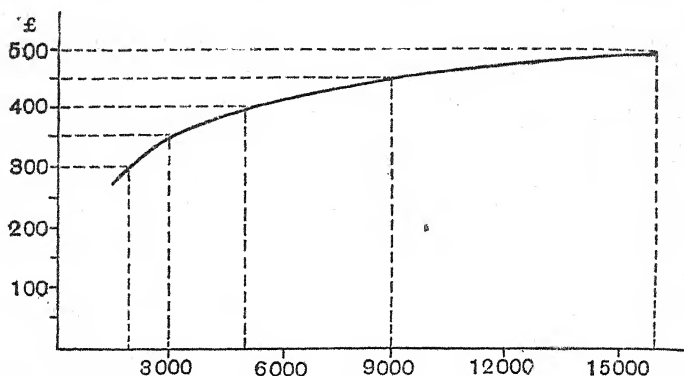
Different manufacturers have very different costs of production so that a price which would give a profit to one would cause loss to another. A high price enables what we call the "weaker producers" to sell, a low price excludes them from the market altogether. In this way the quantity supplied is affected by changes of price.

The way the possible supply varies with price is suggested by the following **Supply Schedule**:—

Under certain given conditions of manufacture

Number of cars that could be supplied at					£500 = 16,000
"	"	"	"		£450 = 9000
"	"	"	"		£400 = 5000
"	"	"	"		£350 = 3000
"	"	"	"		£300 = 2000

This Elasticity of Supply can also be indicated by means of the **Supply Curve**, which can be interpreted as above.



THE DETERMINATION OF PRICE.

So far, we have examined more especially

- (a) The meaning of Demand and Supply.
- (b) The fixing of the buyer's maximum and the seller's minimum.
- (c) The effect of Price on Demand and on Supply.

Now we must give our attention to the effect of Demand and Supply on Price and in this way we shall arrive at a final answer to our main question—How is the price of a thing determined?

When at any given price the demand is greater than the supply, the sellers will be able to ask more. The higher price will make more people willing to sell, but fewer willing to buy. On the other hand, if at any given price the supply is greater than the demand, some sellers will ask less. The lower price will then make fewer willing to sell and more willing to buy. Thus, through changes in price, demand and supply gradually approach one another till they equate. The price at which they equate is called the **Market Price**, and this is the price at which goods change hands at any given time and place.

MARKET PRICE

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This will be more clearly understood if we put together in one table the Demand and Supply Schedules already given.

BUYERS

Demand

no. of cars

1000	...	...
3000	...	...
[5500	...	...
6000	...	...
10,000	...	...
15,000	...	...

Price

£

500	...
450	...
410	...
400	...
350	...
300	...

SELLERS

Supply

no. of cars

16,000
9000
5500]
5000
3000
2000

If the price asked were £450, 9000 would be offered but only 3000 would be bought. In order to sell their cars, the strongest producers, i.e. those who produce at lowest cost, will ask less, say £400. The change in price lowers the supply to 5000, but raises the demand to 6000. Now it is the other way round: the demand is greater than the supply. The sellers can now ask more and they raise the price to £410. At this price it is possible that 5500 would be offered and 5500 would be bought, in which case the market is in a state of equilibrium and the market price is £410.

Two questions need to be answered before we are in a position to make our final statement about Value¹.

¹ In order to simplify as far as possible this very complicated problem, the following assumptions have been made which, though subject to modification in individual cases, may be regarded as generally true:—

1. That the goods are sold in the wholesale market and under ordinary conditions of competition.

2. That buyers and sellers are actuated by ordinary business considerations—viz. that no buyer will give more for a thing than he thinks it is worth to him, and that no seller will take less for an article than its cost of production, which is taken to include such a profit as would be a necessary inducement to him to continue the business.

1. Why would not more than 5500 cars be bought at £410? Because the utility of that particular type of car to those who did not buy was less than £410. Many of those who bought the cars would have given a higher price if necessary, but the persons who were only just induced to buy may be assumed to have been willing to give £410 and no more. The utility of the car to each of them, then, was £410. These buyers were just over the margin between buying and not buying, so £410 is said to be the **marginal utility** to them of a motor-car.

2. Why would not more than 5500 be sold at £410? Because under existing conditions of supply all cars in excess of 5500 would have had to be supplied by manufacturers whose cost per car was greater than £410. Many of those who sold could, if necessary, have taken a somewhat lower price, but we may assume that to those who were only just induced to sell the cars cost £410 each. These makers were on the margin between selling and not selling; £410, therefore, represents the **marginal cost of production** of the car.

The whole question may now be very briefly summed up:—

The Price of anything (i.e. its money value) is determined by the interaction of two forces, Supply and Demand, which act and react on one another through the medium of price-changes until a state of equilibrium is reached. The equilibrium or Market Price measures at the given time and place both the marginal utility to those just induced to buy and the cost of production to the marginal sellers.

CHAPTER X

THE MACHINERY OF EXCHANGE

"Money is the centre around which Economic Science clusters."

MARSHALL¹.

THE difficulties attending exchange by *barter* have led to the use of money. People do occasionally exchange one object for another, e.g. a man may exchange a motor-bicycle for a typewriter, but in the ordinary business of life we exchange what we have for what we want by means of sale and purchase. This needs some one thing for which all others can be exchanged and that one thing is called **money**. Money then is not desired for itself but for what it will purchase; it is like a form of machinery which makes easier and simpler the process of exchange.

Functions of Money.

Money has various functions or uses, but for our purpose it will be sufficient to mention its two chief ones:—

1. **Money is the medium of exchange.**
2. **Money is the measure of values.**

This first use of money is the very reason for its existence. The seller parts with his goods for money, because he knows that everyone else will also accept money for goods. Thus through the medium of money his own goods or services are really exchanged for the goods or services of others. The second use of money is also essential. The value of everything can be measured in money and in this way the values of different things can be compared. For instance, supposing the price of tea were 2s. a lb.,

¹ See footnote to page 1.

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of coffee 1s. 6d. and of sugar 3d., we could say that 4 lbs. of coffee are worth 3 lbs. of tea, that 1 lb. of tea is worth 8 lbs. of sugar, and 1 lb. of coffee worth 6 lbs. of sugar. Money is thus used as a measure of value and by its means we are able to calculate exactly what we can get of other things in exchange for the goods we sell or the services we render—or in other words we are able to compare the sacrifice made with the satisfaction obtained. For example a man is paid 30s. a week and with that 30s. he provides for the needs of his family. Since the value of his services and the values of the things he buys are expressed in money he is able to calculate what amount of effort on his part is needed to satisfy a particular want.

Forms of Money.

The idea of money is in our minds closely associated with various forms of paper money and with coins. But it must be borne in mind that paper money and coins are not the only forms of currency recorded in history, and in some parts of the world even at the present day other articles are used as a medium of exchange.

When money was first used, the great idea was to get in exchange something which was in general demand, which could be used by the person himself or which other people would be only too glad to take from him. This would probably be some article of personal adornment, some commodity of general consumption, or, in the case of an industrial community, the product of a particular industry. The form of the money would vary with the degree of civilization and the habits of life of the people. The fondness of the savage for ornament has led various tribes to adopt glass beads or cowrie shells as their medium

of exchange. In olden days cattle were in general use especially among pastoral peoples. At a later date the fur traders of North America made use of skins, and the tobacco planters of Virginia of tobacco-leaf. Many other examples might be given but these are sufficient to indicate the character of the currency which under primitive conditions of life would readily be adopted.

These various forms of money were all chosen for one quality—the essential one of general acceptability. But as trade developed these more primitive forms of money proved unsuitable. Some were too perishable, others too costly to transport, or too variable in quality. Finally, in all the more civilized countries, the precious metals, gold and silver, were chosen as possessing all the qualities most desirable in a currency¹, though since the outbreak of the Great War paper money has all over the world taken the place of the gold coins so widely used up to that time. In addition to their being everywhere **acceptable**, gold and silver are very **portable**, for they contain great value in comparatively small bulk; they are **durable**, for they wear out very slowly in use; they are **imperishable**, for if stowed away they lose neither in weight nor in quality; they are **valuable** in the form of bullion (i.e. uncoined metal) as well as in the form of coin; they are **fusible** and so if not needed as coin they can be melted down and put to some other use; they are **uniform** in quality, every piece of pure gold or silver being of the same substance throughout; they are easily **divisible** and so can be made into coins of the size required; they are **difficult to counterfeit**, thus making it difficult for false coins to be put into circulation. It seems hardly likely, however, that a gold currency will ever again come into general use. The currency requirements

¹ The money in use in a country is called its currency because it is current, i.e. passing freely from hand to hand.

of the world are now so enormous that, even if there were enough gold obtainable to meet immediate coinage requirements, the maximum gold production of the world would probably not suffice to maintain this coinage in addition to supplying what is needed for gold reserves and for manufacturing purposes.

Coinage.

When gold and silver were first used as currency they were not in the form of coins, but were lumps or bars of metal and all payments had to be made by weight. The metal had also to be assayed or tested to see if it was of the required purity.

After a time the purity of the metal was indicated by a stamp impressed on one side of each bar. Later on however this very slow and clumsy method was abandoned and pieces of metal of a definite weight and fineness were used instead¹. These were of various shapes, but for the most part they were round, and were stamped on both sides. This system had the great advantage that the money could now be counted instead of weighed. But there appears to have been a great want of uniformity in the coins of early days, for in a document² dating from the reign of Henry II it is recorded that when the sheriffs paid into the Exchequer what they had received in the way of taxes, the money was first counted by the tellers, then weighed by the chamberlain, after which a portion of it was tested by the silverer. The document is in the form of a dialogue between a master and his pupil. The latter cannot understand why counting should not be enough, so he says, "Inasmuch then as all money of this kingdom

¹ The English pound was originally a pound weight of silver. There was no gold coin of that name before 1817.

² *Dialogus de Scaccario*.

liament (the Coinage Act of 1870) which made the gold coins legal tender to any amount has not been repealed, these coins, though not in circulation, must still be regarded as a form of legal tender.

The issue of Currency Notes was authorized by the Currency and Bank Notes Act, 1914, of which the following is the principal clause:

"The Treasury may, subject to the provisions of this Act, issue currency notes for one pound and for ten shillings, and these notes shall be current in the United Kingdom in the same manner and to the same extent and as fully as sovereigns and half-sovereigns are current and shall be legal tender in the United Kingdom for the payment of any amount."

2. Money Standard. Since one of the main functions of money is to act as a measure of values¹ it is necessary to have in each country some recognised standard by which all values can be measured, and which shall be subject to as little variation in its own value as possible.

Before the Great War several of the great commercial countries had adopted a gold standard, i.e. all values could be expressed in terms of a definite amount of gold, usually the amount contained in the principal gold coin of the country, hence in Great Britain, the standard adopted was, and still remains, the pound sterling, represented by the gold coin (though not now in circulation) known as the sovereign.

Some countries, e.g. China, have adopted a silver coin as their standard, and some have at one time or another adopted a double standard, e.g. France and the United States of America, using both gold and silver for this purpose at a fixed ratio to one another.

¹ See page 115.

Countries which have a single standard are known as **monometallist**. Those which have a double standard are known as **bimetallist**. The term standard is also used in another sense. When we speak of coins as being of standard weight and fineness we mean that they contain the legal amount of pure metal. Money which is up to the standard set by law is called good, while that which is below the standard is called bad. In nearly every country the gold value and the face value of the standard gold coins are almost identical.

3. Free Coinage. Under the Coinage Act of 1870 the English Mint was compelled to accept all the gold that was brought to it and to make it into coins without charging anything for so doing. For every ounce of gold received the mint had to give out coin to the value of £3. 17s. 10½d.

The English coinage of gold was thus free in two senses:—

(1) It was free because there was no restriction as to the amount coined.

(2) It was free because no charge was made for coining¹.

As a matter of fact, however, importers of gold who wanted to get money in exchange did not take their bars to the mint, but to the Bank of England, where they obtained Bank Notes in payment for them. By the Bank Charter Act of 1844 all persons were entitled "to demand from the Issue Department of the Bank of England Notes in exchange for Gold Bullion at the rate of Three Pounds, Seventeen Shillings, and Nine Pence per Ounce of Standard

¹ Coinage is also said to be "gratuitous" when no charge is made by the mint.

Gold." They got $1\frac{1}{2}d.$ less per ounce by going to the Bank of England but they did not have to wait for their gold to be coined. It was better for them to have the money at once than to wait perhaps three weeks and then get $1\frac{1}{2}d.$ more. Thus the usual proceeding was for the gold bullion to be bought by the Bank of England and paid for in Bank notes (which could then at will be exchanged for gold coin) and for the Bank to get it coined by the mint, at such times and in such quantities as the business of the country seemed to demand.

The outbreak of War did not bring about any change in the legal position of the Bank in this respect, but, owing to the fact that the market price of gold rose very considerably, it is not surprising that people owning gold would not sell it to the Bank at £3. 17s. 9d. per oz. when they could get very much more for it elsewhere.

However in 1925, in order to facilitate the return to a **gold standard**¹, an Act was passed which amongst other things relieved the Bank of the necessity of issuing gold coin in exchange for its notes and at the same time relieved the mint of its obligation under the Act of 1870 of coining any gold bullion brought to it for that purpose except in the case of gold brought to it by the Bank of England.

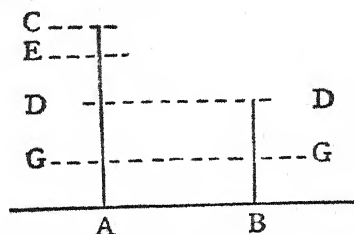
4. Brassage. When the Government of the country takes out of the coin an amount of gold equal to the cost of coinage, this deduction is called *brassage*. In France this amounts to 4 centimes on every 20 franc piece, the coin therefore is only worth 19 fr. 96 centimes. (See Diagram.)

5. Seigniorage. When the Government makes a profit out of the coinage by fixing a low legal standard, the amount taken out in addition to the cost of coinage is

¹ See page 120.

called *seigniorage*. There is a heavy seigniorage on English silver coins. (See Diagram.)

6. **Debasement.** It has sometimes happened, as in Tudor times, that the sovereign has issued money containing less than the standard amount of precious metal. This difference between standard and real value is called *debasement*. (See Diagram.)



Let AC=nominal value of the coin.
 BD=legal amount of metal in the coin.
 BG=actual amount of metal in the coin.
 Then CE=Brassage.
 ED=Seigniorage.
 DG=Debasement.

7. **Depreciation.** Money is a form of *wealth*, and may therefore be said to have a *value*. Money is an object of desire and effort is made to obtain it, but money is not desired for its own sake, it is desired because its possession enables a person to buy what he needs and thus to satisfy his wants. The value of money depends on the quantity of other things that can be obtained by means of a given unit of money—say a sovereign. This evidently depends on prices. *If prices are raised*, less can be bought with a sovereign and the value of money is said to have fallen, money has become **depreciated**. *If on the other hand prices are lowered* more can be bought with a given quantity of money than before and the value of money is said to have risen, money has become **appreciated**.

8. **Token Money.** This is also called subsidiary money or **Billon**. It consists of coins used for purposes of small change, such as English silver and bronze coins. These coins often contain but a very small portion of their face value in precious metal. They are not freely coined, being issued only by authority of Government and in such quantities as are required for purposes of commerce.

9. **Gresham's Law.** Sir Thomas Gresham¹ laid down the principle that in any country where two kinds of legal money are in circulation at the same time *the bad money always drives out the good*. The validity of the principle cannot be discussed here, but its meaning is that those who only want the coins for the gold they contain, such as foreign merchants who have sold goods in England, bankers and others who wish to hoard money, and goldsmiths who may want to melt the coin down, would refuse to take any but the heavy money. This would therefore tend to go out of circulation leaving for the most part only the light money for general use.

Paper Money.

Before the Great War paper money in this country was comparatively little used as a medium of exchange owing to the fact that Bank of England notes, the only form of paper money then in circulation, were and still are not issued of less value than £5. Where money changed hands it consisted in the main of gold coins supplemented by silver and copper for purposes of small change.

We must not, however, forget the important part played by cheques in every day business transactions. They are in

¹ Sir Thomas Gresham was a London merchant, born 1519, died 1579; assisted Queen Elizabeth with the recoinage of silver in 1560; founded the Royal Exchange and Gresham College.

very general use even for quite small sums, and they may be regarded as the most important and practical means of making payments, especially when buyer and seller are not in personal contact with one another at the time of payment. Cheques take the place of money but they are not money. They are a form of credit and hence they will be dealt with under that heading later on in the chapter.

Since 1914 however, paper money has come into much more general use. The almost universal withdrawal of gold currency made it necessary to find a substitute, and in notes of various denominations a currency was provided both cheaper and more elastic. In this country the smallest currency note is for ten shillings but in France notes for one franc and in Germany for one mark are in circulation.

There has been much discussion as to whether or not paper money can satisfactorily fulfil the functions of a currency. The two chief of these were given earlier in the chapter, viz. to be (a) a medium of exchange and (b) a measure of values. As regards the former so long as paper money is accepted by creditors without hesitation, it can be asserted that it is as good a medium of exchange as coin, but as regards the latter, the answer is not nearly so clear or so simple.

If, as has already been pointed out, a measure of any kind is to be regarded as good it must be fixed and invariable. Take for example the measures of length, or weight, or capacity, the yard, the pound, the gallon must conform to the standard kept at Greenwich Observatory, and hence are always the same.

It is not possible to find a measure of values so invariable as these, but gold has always been regarded as the nearest possible approach to an unchanging standard. But how can paper money act as a measure of values? True, a one pound note has not like the gold pound an intrinsic value of its

own, but it is considered to represent a gold pound, and so long as its purchasing power remains the same as that of a gold pound, it has an equal value to it and it is an equally good measure.

The whole problem then consists in keeping the paper currency on a par with gold and this is done mainly in one of two ways¹:

either by making it convertible into gold on demand,
or by regulating the amount issued.

Both of these ways can be well illustrated from the paper money in circulation in this country and hence the examples given below will be in the main British.

It is usual to divide paper money into two classes, **convertible** and **inconvertible**. **Convertible paper money**, as the name suggests, can always be converted into coin at the will of the holder. The bank or Government which issues it undertakes to redeem it on demand by paying the sum printed on it. This makes it necessary for banks or other currency authorities when issuing notes to have in reserve a large amount of gold or silver, so that under all circumstances they may be able to give coin in exchange for the notes that are presented for payment. It is not necessary to have a metallic reserve equal to the full amount of the notes issued, for it would hardly be possible to present all the notes for payment at one time. For example, Bank of England notes are *convertible* but the amount of the notes issued by that bank is $19\frac{3}{4}$ millions more than the gold kept in reserve. Thus when as might happen at some particular time the issue of notes is about $169\frac{3}{4}$ millions, there is gold in the cellars of the bank of a value of $19\frac{3}{4}$ millions less—or about £150,000,000.

¹ A third way might be mentioned as auxiliary to the latter of these, viz. by the Government always accepting the currency in payment of customs duties and other taxes.

The issue of notes by the Bank of England is regulated by the Act of 1844. According to this Act, notes in excess of the 19 $\frac{3}{4}$ millions just mentioned can only be given out in exchange for gold (which may be in specie or in bullion¹) and gold must be given by the bank in exchange for all notes brought back. Thus the process is automatic—*notes go out when gold comes in and gold goes out when notes come in*—and it secures two important things:—

(1) The issue of notes never exceeds the legal amount.

(2) The proper reserve of gold is always maintained.

The only change in the legal position of the bank that was made at the outbreak of war had reference to the restriction of issue. By the Currency and Bank Notes Act of 1914, the Bank of England could on the authority of the Treasury "issue notes in excess of any limit fixed by law." This, however, was only a temporary expedient and the issue of notes does in fact conform to the requirements of the 1844 Act.

The bank's liability to exchange its notes for gold on demand remained unaltered, but in practice the right of taking notes to the bank and converting them into gold was during the Great War and the years immediately following very little exercised. The two main purposes for which the gold obtained from the bank is generally used are (1) for ordinary currency purposes and (2) for export, but gold coin was not in circulation and licence was required for export (and licences were not granted unless any special reasons could be given), hence the person demanding gold was looked upon with a certain amount of disfavour if not with suspicion, as there was always the risk that the gold might be melted down to take advantage of the high price which gold bullion was fetching in the market.

¹ Specie=coin, bullion=uncoined metal.

An important change as regards the convertibility of bank notes was made by the Gold Standard Act of 1925 which enacted that "the Bank of England shall not be bound to pay any note of the Bank in legal coin" and that "Bank notes shall not cease to be legal tender by reason that the Banks do not continue to pay bank notes in such legal coin." But the bank continued to be bound to sell gold bullion at the rate of three pounds, seventeen shillings and ten pence halfpenny an ounce, though only in the form of bars containing 400 ounces of fine gold. Since 1925 export of gold has been permitted without licence.

Thus the conditions under which bank notes are issued—viz.

- (1) that the notes issued are with the exception of a prescribed amount covered by gold,
- (2) that the bank is compelled to sell bars of gold at the standard rate—

secure the stability of the pound sterling and render it an efficient measure of values.

Inconvertible paper money is issued without any undertaking to exchange it for gold or silver on demand. It is merely money in the form of paper, instead of in the form of coin. It is in most cases issued by the Government and not by a bank. The amount issued is left to the discretion of the currency authority and no reserve of gold is required to cover it. It costs hardly anything to issue additional quantities of this money and hence there are many examples of Governments when in great financial difficulties, as for example in recent times Russia, Austria and Germany, meeting their liabilities by issuing paper money, which, owing to the enormous amount that was issued, became after a time almost worthless.

This, however, is not necessarily the case. The mere fact that the money costs nothing to produce does not mean that it has no value to those who receive it. As it is legal tender, it will be received by everyone in the country as full payment of all debts and so it performs the first function of money, that of being a medium of exchange. But inconvertible paper money has two great drawbacks:—

- (1) it is liable to fluctuate in value, i.e. its purchasing power can vary enormously from time to time with the rise and fall of the general price level. The French franc and the Italian lira are good recent examples of such fluctuation.
- (2) it has, as a rule, no value outside the country in which it is issued. It is therefore of no use in international trade. The merchants of other countries will not accept money which they cannot use and which they cannot exchange for gold.

Before the war the use of this kind of paper money was for the most part confined to the smaller and poorer countries such as Greece or certain of the South American republics. Bank of England notes were inconvertible from 1797 to 1821 as a consequence of the heavy drain of gold during the great French wars. The French Revolutionary Government issued paper money called **Assignats** from 1789 to 1796. The issue of inconvertible paper which went by the name of **Greenbacks** was commenced in the United States in 1861 on the outbreak of the Civil War.

The idea that an inconvertible paper currency was something inherently dangerous and a mark of political weakness and instability has been falsified by the experience gained during the Great War and the years which have followed the Peace of Versailles. An inconvertible paper

currency if issued without limit and without proper safeguards can have very serious consequences, but, if the issue is strictly limited and covered by adequate reserves, it may be a perfectly sound form of money. When in August of 1914 the British currency notes were for the first time issued, it was deemed necessary to make them convertible.

"The holder of a currency note shall be entitled to obtain on demand, during office hours at the Bank of England, payment for the note at its face value in gold coin which is for the time being legal tender in the United Kingdom¹."

This clause was never operative because there was no point in exchanging currency notes for gold sovereigns when those coins were not in circulation. In order, therefore, to maintain the paper currency on a par with gold recourse was had to the second of the two methods mentioned on p. 126, viz. regulation of the amount issued, or rather of the amount of the *fiduciary* issue.

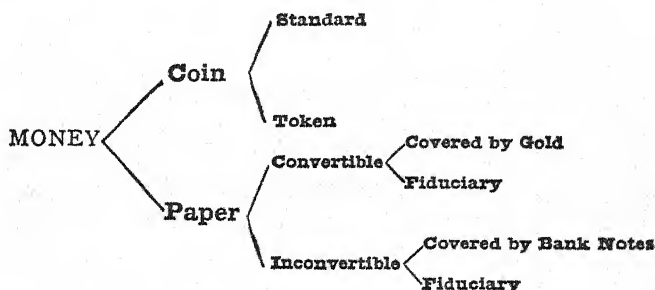
The term *fiduciary* needs some explanation. The British currency notes are fully covered by reserves consisting partly of Bank of England notes and partly of Government securities. The part not covered by bank notes is called the *fiduciary issue*. If, for example, the total issue of currency notes on a particular day were £295,000,000 and of this some £55,000,000 were covered by bank notes, the fiduciary issue would be £240,000,000. The term fiduciary also applies to the 19 $\frac{3}{4}$ millions of Bank of England notes which are not covered by a reserve of gold. The legal maximum of the fiduciary issue is fixed for each year by the Treasury, the practice being for the actual maximum of one year to become the legal maximum of the next

¹ Currency and Bank Notes Act, 1914.

The legal maximum for 1927 is just over £247,000,000. For 1926 it was just under £248,000,000, so that it can be seen that there is a tendency to diminish the fiduciary issue a little year by year.

The Gold Standard Act of 1925 repealed that section of the Currency and Bank Notes Act of 1914 which had made the currency notes convertible, so that from that time they have been legally as well as practically inconvertible.

This section on money may well be closed with a table of the various forms of money which have been here described.



Credit.

Money is not the only medium of exchange. Goods are often paid for by Cheque or by Bill of Exchange. These, however, are not in themselves an equivalent for the goods such as money would be, they are not payment but promises to pay. Yet business men are willing to receive them. How can this be explained?

(1) They have confidence in the person who has given them the cheque or the bill, believing that when they demand the promised money they will get it.

(2) On the strength of the promises made to them they are able to make similar promises to others.

Since this method of facilitating exchange is based on confidence or trust in the honesty and ability to pay of the person who makes the promise, it goes by the name of **Credit**.

A distinction, however, must be drawn between the popular sense of the term and that in which it is used by business men. Many people look upon credit as a convenient way of buying things without having to pay for them at the time. One frequently hears that a certain tradesman will give three months' credit or will allow a certain discount if cash is paid. This merely means that he is willing to meet his customer's convenience by waiting three months for his money, while the customer on the other hand is willing to pay in three months' time rather more than would be necessary if he paid cash for the goods at the time of purchase. The tradesman has rendered the customer a service for which the latter is willing to pay.

The business man on the other hand regards a sale for credit as an incomplete transaction. He has parted with his goods but has received nothing in return. No exchange has in fact taken place. Such a transaction therefore is a sale only in name, and during the period that the seller has to wait for his money, he may be said to have lent the goods to his customer.

A credit transaction may take one of two forms. There may be a written promise to pay or there may be none. The tradesman who gives three months' credit asks for no written promise; he has confidence that his customer will pay in due course and experience has taught him that even if he is sometimes kept waiting for his money his confidence is as a rule not misplaced. There is, however, in this respect a great difference between trade which is carried on between people in the same neighbourhood or

district and that between people in different countries. In the latter case it is usual that the buyer makes a definite promise to pay at a specified time in a document known as a **Bill of Exchange**.

Bills of Exchange.

The operation of *bills of exchange* is too technical a question to be dealt with in the present book. It must suffice to point out very briefly what a bill of exchange is and why it is used in the world of commerce.

In **Foreign Trade** payment for goods bought is not so simple a matter as it is when buyer and seller both live in the same country. For instance, a German merchant in Hamburg sells goods to a customer in London. How will he be paid? The London importer could of course send English money to Hamburg but (1) the German merchant cannot use English coins in his own country, and (2) the cost of sending the money would add considerably to the cost of the goods. The bill of exchange gets over both these difficulties. This will become clear if a second transaction is added in which an English merchant sells goods to a customer in Hamburg.

A in Hamburg sells goods to *B* in London.

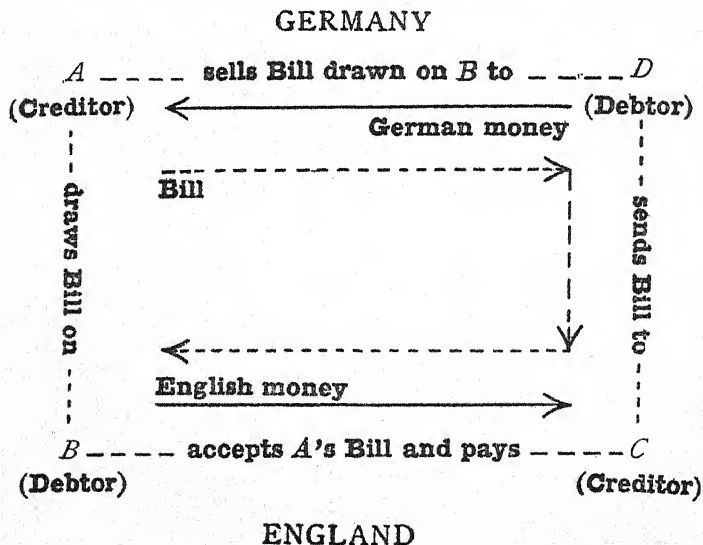
C in London sells goods to *D* in Hamburg.

For convenience it may be assumed that the amount of the invoice was in each case £1000. *A* starts by drawing a bill of exchange on *B* for £1000 payable at a future date, say three months hence. When *B* has "accepted" the bill by writing his name across the front of it, he has in effect given a promise to pay £1000 on a certain day to the person named by *A* in the bill. The three months' credit that *B* is allowed will enable him to get the goods and probably to sell them again before he is required to

pay for them. In this way his business can be carried on with a great saving of capital.

But there is the other transaction through which *D* has to pay *C* £1000. *D* does not want to have the expense of sending gold and *C* does not want to be paid in German money. How can this be avoided? The bill drawn by *A* now comes in useful. *A*'s bill was really the right to receive £1000 of English gold in London, and this is exactly what *D* wants in order to discharge his debt to *C*. *D* therefore buys *A*'s bill and sends it to his creditor *C* who collects the money from *B* when the bill falls due. Thus *A* is paid in German money by *D*, and *C* is paid in English money by *B*, and the claims of the creditors in both transactions are satisfied through the operation of a single bill of exchange without any sending of money from the one country to the other.

The use of bills of exchange in foreign trade is shown in the following diagram :—



The following points about bills of exchange should be carefully remembered :—

1. They give the owner the right to receive a specified sum of money at a given place and time and this right can be bought and sold¹.
2. They provide a cheap and convenient way of paying debts incurred in a foreign country.
3. They enable a merchant to be paid for goods sent abroad in the money of his own country.

Payment by Cheque.

A cheque seems to differ in many ways from other credit instruments. At first sight it seems to be only another form of money. A person who gives a cheque at the time of purchase is said to pay cash. The tradesman regards it as a cash transaction. The cheque is an order to the banker to pay a certain sum on demand and does not contain any condition of postponed payment such as is to be found in the bill of exchange. This is true: a cheque certainly resembles money inasmuch as when it is given in payment, to all intents and purposes the transaction is complete. But is it really complete? The cheque is equivalent to a promise to pay and the fulfilment of the promise can be claimed at the bank immediately after the cheque is received. A short interval must certainly elapse, but that is of no real consequence. The essential point to notice is this—if the receiver of the cheque takes it to the bank on which it was drawn and cashes it, i.e. is paid money for it, or if he deposits it with his own banker and the sum in question is placed to his credit in the books of the bank, so far as he is concerned the transaction is complete and it may be said that the

¹ Buying and selling of bills of exchange takes place in London at the Royal Exchange, in continental cities at the Bourse.

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cheque was as good as money. But a cheque is not money and this can easily be shown :—

(1) A creditor is not bound to take the cheque—it is not legal tender.

(2) A cheque can seldom make more than one payment; it does not pass as money does from hand to hand, it has not general acceptability.

(3) A cheque is accepted as payment owing to confidence in the person who offers it; money is always taken without question.

(4) The transaction is complete only so far as the payer and receiver are concerned. The work of the banker has still to be done¹.

A cheque therefore does not fulfil the requirements of money, and, being based on confidence, must be regarded as a form of credit.

Payment by cheque is in England extremely general, much more so than in the continental countries. It is extremely convenient. It does away with the necessity of keeping large sums of money at hand, and the counter-foil of the cheque book is always a register of the payment made. It is a substitute for money and thus enables the trade of the country to be carried on with a much smaller amount of gold. A cheque is also a convenient form in which to receive payment. It may have been drawn on a bank thousands of miles away but all trouble of presenting it for payment is performed by the banker, with whom the person receiving it has a banking account.

¹ An explanation of English banking and of the working of the cheque system would take us somewhat outside the limits of the present work.

BOOK IV

THE INDIVIDUAL INCOME

CHAPTER XI

THE PROBLEM OF DISTRIBUTION¹

"All wealth that is created in society finds its way to the final disposition of the individual through certain channels or sources of income. This process is called Distribution." SELIGMAN².

MAN'S economic effort is, as has been shown, devoted to the getting of an income. But when men work in industrial groups and the effort is consequently a collective one, the result takes the form of a joint income which represents the sum of the incomes of all the members of the group. A further process is therefore needed, viz. **the Distribution of the joint income** among the various members of the group, and the determination of each person's particular share³. Here arises the great difficulty—what is the share of each? The answer to this question seems clear and simple—each one is entitled to a share of the joint product proportioned to his share in the effort. But this is where the real difficulty lies. How is it possible to separate the result of each man's effort from that of the effort of the group? One man has worked as an engineer, another as an invoice clerk; one has been engaged in some process of manufacture, another in conveying the finished

¹ The subject of Distribution is a somewhat difficult one, but the preceding chapters have been preparing the way for it, and if they have been thoroughly understood (more especially Chapter IX which deals with the Theory of Value) even the most difficult parts of Book IV will be readily grasped.

² See footnote to page 56.

³ See diagram on page 172.

goods to the warehouse. It would be difficult to determine what each of these has contributed to the final result. It is one thing to say that each worker is entitled to "the whole produce of his labour," it is another to discover what that produce is. In modern industry a worker seldom produces anything which can be said to be the result of his own unaided effort; it is difficult, therefore, to distinguish between what is due to him and what to those who have worked with him or have supplied him with the materials, etc., for his work. The case of the peasant proprietor presents no such difficulty. It may be assumed that he farms his own land, that he does all the necessary work and that he owns seed, stock and implements. The relation between effort and income is readily seen. He sells his crop or his dairy produce as the case may be; he keeps back as much of the proceeds as is necessary to replace seed and stock, and to repair his buildings and fences; the remainder is the income resulting from his effort. But such a condition of industry is far from typical at the present day, at any rate in the more industrial countries of the world. Large numbers of men work together in the same factory or mine, under another man's direction and control, in buildings owned by someone else, and with materials, machinery and tools which are not their own. Landowners, capitalists, employers and workers have all contributed to the production of the wealth and all will receive a part of it as income. It is by no means clear, however, what any one of these has contributed to the final result, or to what share of the produce he is entitled.

Before the Industrial Revolution the problem of Distribution was a comparatively simple one. Under the *Domestic System* the craftsman was an independent producer, and those whom he employed would in the ordinary course of things become masters in their turn. But the development of *Capitalism* changed all this. The craftsman

became a wage-earner; industrial society split up into two classes—employers and employed; the interests of Capital and Labour showed themselves to be antagonistic to one another, and the question of Distribution became the most pressing and the most difficult of economic problems¹.

The claim to a share in the income resulting from any particular business undertaking is based on service rendered, i.e. on the part taken by the individual in the industrial effort as a whole. These services are not all of the same importance and hence are not all equally rewarded. Dissatisfaction therefore easily arises. Some will think that their own particular services are undervalued and that other people are receiving more than their proper share of the joint income. This is the cause of the great conflict between Labour and Capital and of the feeling of injustice which is at the bottom of what is called "Labour Unrest." The members of the employed class as a whole think that the services of the capitalist are too highly rewarded and that their own incomes are in consequence smaller than they ought to be. This is not the place, however, to discuss the question of justice or injustice, notwithstanding its supreme importance. We must concentrate our attention on the act of distribution and attempt to answer three questions:—

I. What exactly is there to distribute?

II. Who are entitled to a share?

III. What determines the amount of each individual's share or income?

I. The answer to the *first* question can be given in very few words—That only can be distributed which has been produced. It was explained in Chapter III² that production does not mean the creation of new objects but

¹ Adam Smith writing before the Industrial Revolution makes hardly any mention of **Distribution**; John Stuart Mill writing after the Revolution had taken place, attaches the greatest importance to it.

² See page 21.

of new utilities. In one of the examples there given, the productive effort resulted in the additional utility which the table had over that of the wood, etc., which existed before the work was commenced. This can now be expressed in terms of money. If the wood, etc., used for the table cost 15s. and the table sold for £2, that which was produced had a money value of 25s. If, again, the table resulted from the joint effort of a group, 25s. is what could be distributed among those who shared in the effort and 15s. would be devoted to what is called the replacement of capital.

It will be well, however, to take an example of a more advanced character. A factory turned out goods in the course of a year which sold for £50,000. The raw material, fuel, etc., used in the process of manufacture cost £10,000 and had to be replaced. Tools and machines were partly worn out, and most of them, it was well known, would have to be replaced in a few years' time, because, even if not worn out by then, they would be old-fashioned and would have to be discarded. A sum had therefore to be set aside at the end of the year for "depreciation," which in the present example amounted to say £5000. Thus £10,000 was needed to replace the circulating capital and £5000 had to be set aside towards replacing the fixed capital. There remained a sum of £35,000 which was available for distribution among those who had contributed to the manufacture of the goods. In this case, £50,000 is said to be the Gross Product, £35,000 the Net Product.

GROSS PRODUCT

<p>Replacement of capital</p>	<p>NET PRODUCT</p>
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The question can now be answered in other terms. **The amount which can be distributed as income among those who have taken part in any industrial enterprise is the net product of the industry.**

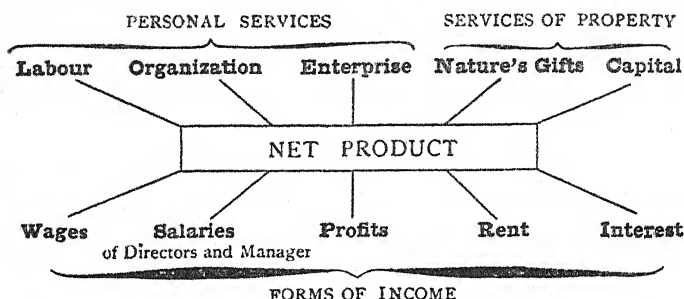
II. A very natural answer to the *second* question would be. Those are entitled to a share of the net product who have contributed to the productive effort. There is, however, some difference of opinion as to who those contributors are. Some think that those who can be seen taking part in the work of the farm, the factory or the office, are the only contributors; others consider that those should be included who have in any way assisted either by personal service or by placing their property at the disposal of the workers. If we bear in mind what was said in an earlier chapter¹ about the requirements of productive effort, we shall recognise that those who provide the requirements are rendering an indispensable service to production. This service must be remunerated or it would not be forthcoming. All the incomes which are derived from the net product of the business are payments for service, and without service rendered there is no income.

The requirements of productive effort, it will be remembered, are five in number, viz. the three forms of human activity—Labour, Organization and Enterprise, and the two external aids—Nature's Gifts and Capital. In the Joint Stock Company, which may be taken as the type of modern industry, these services are rendered by employees, employers, shareholders² and landowners.

¹ Chapter IV.

² The shareholders render a two-fold service: they take the risks and they provide the capital. The service of enterprise seems necessarily associated with capital. Those only can undertake the risks of business who have something to venture, and that something is for the most part capital. On the other hand it is quite possible to lend capital for which full security is given, in which case there is no enterprise. The two services are quite distinct, even if the remuneration for both goes to the same person.

The correspondence between service and income is shown in the following diagram.



III. The earlier economic writers took a very different view of the Problem of Distribution from that taken by most economists of the present day.

The old idea was that the whole annual produce of the industry of a country was distributed among the different classes of producers. A certain amount went to the landowners, a certain amount to the labourers and the remainder to the capitalists. But how can such an idea be realised? Adam Smith tells us that the total produce "is naturally distributed among the different ranks of people," and John Stuart Mill says that this produce "distributes itself by spontaneous action." Neither explanation is at all satisfactory. To-day we approach the problem from the other end. The net product of a particular industry or of a particular productive effort is distributed as income among those who have taken part in it. The sum of such net products throughout the whole country would be the total amount that could be distributed as income and hence would be the sum of all incomes¹. The total income of a particular class such as the wage-earners could only be found by adding together the incomes

¹ This amount is commonly referred to as the *National Dividend* or as the *National Income*.

of all the individual members of that class. But it must be remembered that the only actual distribution that takes place is the division among the members of an industrial group of the results of their joint effort. Distribution, in other words, is the determination of the income of individuals, and not of classes.

It has been said that the net product of the productive effort of an industrial group is distributed in the form of income among the different members of it. But this must not be supposed to mean that the results of the effort are stored up and at the end of the year are distributed in lump sums to those entitled to a share. Goods are being *made* and *sold* and *used* day by day and week by week. At the end of the year there is very little more wealth in existence than there was at the beginning, but during the year all the people in the country have been consuming the goods almost as soon as they were produced. The income may have been received daily, weekly, monthly or quarterly, but some of this income was being expended every day to satisfy the wants which gave rise to the effort that was made.

The method of distribution is practically as follows:—The business organizer may be regarded as the distributor. Before the industrial effort is begun he calculates how much produce is likely to be sold and at what price. He is then able to estimate what the net product is likely to be, and his estimate being based on knowledge and experience is likely to be fairly correct. In the next place he makes bargains with landowners, capitalists and employees, taking care that what he contracts to pay them will leave a sufficient balance for the remuneration of his own services¹. Thus two facts are clear—(1) the distribution is based on estimated product, i.e. on what the results of

¹ In the case of a Joint Stock Company where the organizers are salaried, this remuneration is a fixed amount.

the effort are expected to be, (2) the incomes, according to the terms of the contracts are paid in instalments and are not affected by what the net product actually proves to be at the end of the year. For one service only was no contract made, viz. the service of enterprise¹. If the net product proves to have been greater than the sums paid out in rent, wages, salaries and interest, a surplus remains which is the reward of enterprise, if on the other hand the net product proves to have been less, then the loss falls on those who would have received the surplus if such had existed.

The incomes which the business organizer has contracted to pay are the rewards of services. **Services, like commodities, have a market price,** and that market price is determined by the interaction of the forces of Demand and Supply. The terms Demand and Supply are frequently used in reference to land, to labour, to capital and to business capacity. The reward of any particular service is not determined by the organizer, though, like any other buyer, he has a maximum price which he will not exceed; nor is it determined by those who render the service, though like any other sellers, they have a minimum price for their services without which they will not render them. Between these limits the price of the particular service will be fixed according to the relative conditions of Demand and Supply existing at the time.

There is one other aspect of the individual income that should not be lost sight of, viz. that income is frequently derived from more than one source—is frequently a reward for more than one type of service. Just as the productive effort of an individual may be made either as an independent worker or as a member of an industrial group, so the individual income may be either the whole of the net

¹ In the case of a private undertaking, the organizer's salary also is not fixed by contract.

product of industry or some particular share of it. In the case of the industrial group the net product is said to be *distributed* among those who in different ways have taken part in the effort in question, and according to the market value of the service rendered by each.

The income of the independent producer consists in reality of several parts, but it would be difficult to separate any one part from the rest. The most typical example, perhaps, is the peasant proprietor, whose income, as was shown earlier in the chapter, is the whole of the net product of his industry. Since, however, he provides land, capital, labour and enterprise, his income really consists of four parts—rent, interest, wages, and profits, though, as a matter of fact, he is not likely to draw any distinction between them.

Turning to the incomes of the members of an industrial group, we shall have no difficulty in finding examples in which the individual income consists of more than one share. The tradesman, for instance, often renders the services of capital and enterprise in addition to those of labour and organization, and his income = interest + profits + salary or wages. The farmer may own the land he cultivates, he may supply the capital, organize the industrial effort and undertake all risks; in short, he may supply everything except labour. In such a case his income is really rent + interest + salary + profits, but it is doubtful if the farmer, any more than the tradesman, could state the actual amount of each portion of his income.

This fact then is clear—the individual income consists of one or more of the five shares in distribution, though, in the case of a composite income, it frequently happens that no clear line is drawn between its component parts. For our purpose, however, it will be well to assume that in all cases the five forms of income—wages, salaries, profits, rent and interest—are quite distinct from one another and

are capable of definite measurement. Each form is understood to be the reward of a particular service which at any given time and place has its own market value.

The question of Distribution is here treated in very general terms and in consequence much that is important to notice has been omitted. An attempt, however, will be made to remedy this in the following chapters in which the different forms of income will receive separate treatment.

CHAPTER XII

RENT

"Rent, considered as the price paid for the use of land, is naturally the highest which the tenant can afford to pay in the actual circumstances of the land." ADAM SMITH¹.

THE term **Rent** is in very general use and there seems to be very little uncertainty as to its meaning. In the ordinary way we should probably define it as "The amount paid by the tenant to the landlord for the use of land or houses." The chief points then in our ordinary conception of rent are:—

- (1) that it applies equally to houses and to land;
- (2) that it implies the relation of tenant and landlord.

The economist, however, attaches to the term *rent* a somewhat different meaning. In the first place, he associates rent exclusively with the Gifts of Nature, and regards it as an income arising from the productive employment of any natural agent such as land, mines, water-power,

¹ See footnote to page 36.

etc. This restricted use of the term is general amongst English economic writers¹, but many foreign economists would extend it to cover the income derived from the use of other forms of property. The English economist would not regard as rent the whole of the annual sum paid for the use of a house, a shop or a factory. He would divide it into two parts and say—part of this sum is for the land on which the building stands, and part is for the builder's outlay of capital. The former part only is of the nature of rent, the latter part should be regarded as interest.

In the second place, the possession of a natural agent, such as land, may bring the owner an income in one of two ways:—(1) he may utilize it himself in some form of productive effort and so get an income from the sale of the product, or (2) he may let it to a tenant and so get an income in the form of a fixed annual payment. From this it is evident that the relation of landlord and tenant is not essential to the idea of rent. Rent does not cease to exist when the landowner cultivates his own land.

In order to get some clearer ideas as to the nature and measurement of rent we shall do well to concentrate our attention on the most typical Gift of Nature, viz. *Land*, and more particularly at present on one use of land, viz. the agricultural.

So far, with regard to the rent of land the following points have been established:—

(1) Rent is one of the shares in distribution, i.e. it is a part of the net product of industry.

(2) It arises from the productive use of land.

(3) It is a return for the services rendered to productive effort by the landowner.

¹ "The income derived from the ownership of land and other free gifts of nature is commonly called Rent." Professor A. Marshall, *Economics of Industry*.

The net product of any particular farm may be assumed to be due to

- (a) the fertility or situation of the land,
- (b) the application of capital,
- (c) labour,
- (d) the farmer's skill and enterprise.

Each of these then will be rewarded out of the result of the combined effort. That a part of the produce is due to the natural agent becomes evident when we compare the results of farming different pieces of land. The application of a certain amount of capital, labour, etc., to one farm may result in a yield of 20 bushels of wheat to the acre, but the same application to another farm may bring half as much again. The difference is due to greater fertility; the land has rendered more service to production in the one case than in the other and the share of the produce which forms the income of the landowner varies according to the productivity of the land.

The earlier economists thought that the rent of land was a thing by itself, and that it was determined by its own special laws. They therefore formulated what is called the *Theory of Rent*. This theory has more especially been associated with the name of Ricardo¹. He used the term Rent in its very narrowest sense. "Rent," he says, "is that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil." But in a country like England, where the land has been cultivated for centuries, and where all the land used for agricultural purposes has been improved by the frequent application of capital, it is impossible to

¹ David Ricardo, one of the most distinguished of the English classical economists, born 1773, died 1823. Most famous work, *Principles of Political Economy and Taxation* (1817). Noted for his very abstract treatment of the subject and for his theories of Value and Rent.

know how much of the produce is due to the "original and indestructible powers of the soil" and how much to the improvements made. It is only in districts like the prairies of the Canadian Middle West where land can be cultivated in its natural state, that it is possible to find out how much of the produce is rent in the Ricardian sense of the term. Rent for all practical purposes must be regarded as the landowner's income arising from the use of the productive powers of the land, whether these powers are "original and indestructible" or the result of permanent improvements.

It was said earlier in the chapter that possession of Nature's Gifts may bring the owner an income in one of two ways : that the owner of land may obtain an income

- (1) by cultivating the land,
- (2) by letting it to a tenant.

Here we have two kinds of rent, the distinction between which is of the greatest importance. The income which is derived from the cultivation of land may be called **economic rent**. It is the surplus which remains to the cultivator after he has paid all expenses of cultivation and has remunerated himself for his own productive effort. Rent in this sense may be said to measure the excess of the value of the crop over the expenses of its production.

The rent which is paid by the tenant to the landlord may be called **contract rent**, because it is determined by a contract between the two parties concerned. When a farm is cultivated by a tenant, it is he who gets the surplus which is due to the fertility and situation of the land, or in other words, the economic rent. Because of this he is willing to pay an annual sum (not exceeding the economic rent) to the landowner for the use of his land. The sum he pays is really the price of the advantages he expects to derive, and like every other price it is determined by the interaction of the forces of Demand and Supply.

Economic Rent. Some difficulties may present themselves with regard to the measurement of the cultivator's surplus to which we have given the name of *economic rent*. In order to clear these up let us take a practical illustration. Three farms, *A*, *B* and *C* were cultivated by farmers (either owners or tenants) of equal capacity. The crops from the respective farms realized £1000, £800, £600, and the expenses of production were £850, £700, £550. Thus from farm *A* there was a surplus or economic rent of £150, from farm *B* of £100, from farm *C* of £50. These facts are represented in the following table:—

	FARM A.	FARM B.	FARM C.
Produce sold for	£1000	£800	£600
Expenses of cultivation including replacement of capital	£600	£425	£290
Cost of sending produce to market	50	75	60
Income for farmer	200	200	200
Total expenses of production	850	700	550
Producer's surplus	£150	£100	£50

If the amount of produce derived from a particular farm were always the same and the prices of such produce did not vary, to estimate the economic rent would be a very easy matter. But such is not the case; crops and prices vary enormously. The crops vary according to

- (a) the skill of the farmer,
- (b) climatic conditions.

Prices vary according to the state of the market. One year there may be a large surplus and another year there may be little or no surplus, there may even be a considerable

deficit. Are we to conclude then that economic rent may one year be some hundreds of pounds and another year a minus quantity? Not at all. The expenses of production, wages of labour, etc., are based on a calculation that, taking one year with another, the produce will be sufficient to pay these expenses and to leave a producer's surplus. Similarly to arrive at any measurement of economic rent we must take average crops and average prices, while with regard to differences of skill on the part of the farmers allowance must be made under the heading of "Income for farmer," this item being larger in the case of a good farmer and smaller in the case of a bad one. It will however be at once apparent that this measurement of economic rent can never be quite exact, it can never be more than an estimated amount. Let us suppose for example that farm *A* is cultivated by the owner, and farm *B* by a tenant. It is quite possible to work out exactly the sum realized by the sale of the produce and the expenses of production and marketing, but the income of the farmer is not a fixed sum. In the examples given it was assumed that each farmer got £200, and that if he did so the economic rent of farm *A* would be £150, and that of farm *B*, £100. But since the cultivator is not paid any definite sum, we are obliged to fall back upon some estimate as to what income farmers of ordinary ability do as a rule obtain and make this the basis of our calculation. When the ordinary expenses of production have been paid the surplus consists of two parts—the farmer's income and the economic rent. In the case of farm *A* the entire sum goes to the owner because he is himself both farmer and owner, but in the case of farm *B* farmer and owner are different persons. In the former case it makes no difference how the shares are fixed, but in the latter it is all important, and it is settled by the tenant paying to the landlord an annual sum fixed by contract for the advantages which he

expects to derive from the use of the land, the remainder being the reward of his services as farmer.

Thus *economic* rent is not that payment by a tenant to his landlord which in ordinary everyday life we speak of as rent, but it is the surplus which remains to the producer for which if he is a tenant, he pays a compensation to the landlord in the form of *contract* rent. Economic rent can only be expressed as a definite sum if the farmer's income is known, but in any case an estimate of economic rent can be made with sufficient exactness to form the basis of the contract between landlord and tenant.

Contract Rent. Without this enquiry into the character of *economic* rent, it would have been very difficult to understand how *contract* rent is determined. It has already been noticed that the amount paid by the tenant to the landlord is in reality the price of certain special advantages either of fertility or of situation. Just as in the case of the price of commodities, there are two sides to the question: The Demand side (i.e. the point of view of the tenant), and the Supply side (i.e. the point of view of the landlord). These must be examined separately before we can attempt to answer the question, how is rent (i.e. *contract* rent) determined?

Demand for the Use of Land. Bearing in mind the statement made in Chapter IX that there is no such thing as Demand apart from price, we may say that the farmer is willing to take a farm at a certain rent because he thinks that if he were to cultivate it he would be able to pay all expenses, to get an income for himself and to have a sufficient surplus to enable him to pay the rent that has been asked. This surplus, which is in reality his estimate of the economic rent, is the utmost that he would be willing to pay. It is his *maximum* price. Good land yields a larger surplus per acre than bad land, the tenant's maximum will therefore vary with the character of the soil.

Other considerations which will influence the tenant's maximum are the facilities for marketing his produce and the price he is likely to get for it.

There is a demand for the use of land, because there are advantages to be derived from its cultivation, or, in other words, because of its productivity. The greater the productivity, the greater as a rule will the demand be, and *vice versa*.

Supply of the Use of Land. The landlord has various uses to which he can put his land. He can cultivate it himself, he can turn it to some purpose of pleasure or sport, he can let it to those who will pay him a rent for its use. If he chooses the last, as he does for the most part in a country like England where there are but few small owners, there is said to be a *Supply* of the use of land. But the supply depends on the price, i.e. on the rent he can get. If there is little demand for the use of land and rents are low, it is very probable that in some cases the landlord will himself cultivate farms that were previously let to tenants.

What rent will he expect to get? Like the tenant he will make an estimate of the surplus likely to result from the cultivation of the land, an estimate that is of the economic rent. He knows that all farmers are not equally skilful and that they would not put the land to precisely the same use. He knows that crops and prices vary from year to year. He therefore takes all these things into account and calculates what the surplus would probably be if

- (1) the farmer were a man of average skill,
- (2) the land were put to the use for which it was most suitable,
- (3) crops and prices were about an average,
- (4) the farmer received as income what might be considered as the ordinary remuneration.

It is very possible that his calculation will not be the same as that of the tenant, for the latter estimates what surplus he personally is likely to obtain, and attaches a definite value to his own services. The landlord's calculation, based as it is on average conditions, would enable a farmer above the average to earn a larger income, while it would enable all farmers to set the good years against the bad, and on the average to earn an income that would be a sufficient inducement to them to continue farming the land. If the landlord failed to get this rent, he might be willing to take a smaller sum rather than have the farm unlet, but he has a *minimum* below which he will not go, viz. the rent at which he would only just be induced to let the farm. If he failed to get this minimum he would doubtless cultivate the land himself or put it to some other use.

The Determination of Contract Rent. The bargaining which takes place between landlord and tenant very closely resembles Example V in Chapter IX¹, in which there was only one seller but two buyers. The scarcity of land often makes the landlord in question the only person from whom land can be rented in his particular neighbourhood, while there may be many persons anxious to take the vacant farm. Under such circumstances the landlord's position is a very strong one and it is very probable that he will be able to get the rent he asks. If the demand for farms is very brisk he will probably be able to raise his price till it reaches the maximum of the strongest applicant, if, on the other hand, there is little demand, he may have to lower it to his own minimum.

There is a close connection between rent and the price which the produce fetches in the market. When the prices of the different kinds of farm produce are high, farming becomes more profitable, with two results—(1) the tenant's maximum is raised, (2) the demand for farms is increased.

¹ See page 106.

Thus the rent is likely to go up, for, owing to the increased demand, it will probably be forced up to the new maximum. On the other hand, when prices are low, farming becomes less profitable, the maximum is lowered, demand falls off and rents tend to decrease.

In conclusion it may be said that as the supply of land is limited and as the demand for it in an old country seldom falls short of the supply, **the price paid for its use tends to approximate to the producer's surplus, i.e. to the *economic rent*.**

The whole of this argument has been based on the assumption that landlord and tenant are business people, each knowing and seeking his own interest, each bent on securing the greatest possible advantage from the bargain. There is however one important consideration which must not be overlooked. Landlords frequently do not regard the letting of their farms merely as a business transaction, and even when they do, they are not always what would be called "good business men." The consequence is that from considerations of custom or sentiment, or from absence of practical knowledge and bargaining skill on the part of the landlord, farms are often let at rents below those which could be obtained under conditions of ordinary competition.

Ground Rent. We have so far confined our attention to the rent of land used for agricultural purposes. It now remains to say something about another kind of rent, viz. the rent of land used for building sites. Here again we have the same distinction as before. There is ground rent which we may call *economic* because it is the surplus to be derived from the use of the land for building purposes, and there is ground rent which may be called *contract* because it is the amount fixed by contract between landlord and builder. If the landowner builds a house on his own land, he may be said to derive an economic rent from its use, inasmuch as he enjoys all the advantages which

are obtained from that land. But if he lets the land to a builder for a period of say 99 years, it is the builder who gets that economic rent for a specified period and pays to the landlord an annual sum or *contract rent*, the amount of which is fixed by bargaining between the two parties. It is this fixed money payment which alone as a rule goes by the name of **Ground Rent**, though strictly speaking the term should equally apply to the net advantage to be obtained from this use of the land by the landowner himself.

The economic rent as before forms the basis of the contract. There is a demand for the use of the land for building purposes because of the net advantage to be derived, and the greater the advantage, the greater the demand. The main advantage is that of situation; but land in a particular situation is strictly limited in quantity, the landlord is not likely, therefore, to supply his land unless he gets a full equivalent for the advantages he forgoes by allowing someone else to build on it. Under these circumstances it may in general be assumed that the ground rent paid by the builder represents, as nearly as can be estimated at the beginning of so long a period as 99 years, the economic rent of the land.

Where for any reason, such as the growth of a town, or improved railway or other communication, there is a great increase in the demand for houses, shops or factories in a particular neighbourhood, the ground rent tends to rise. This makes many people desirous of buying such land and its value becomes considerably increased. This increase in the market value of the land due to what is called "the progress of society" goes by the name of **the Unearned Increment**.

CHAPTER XIII

SALARIES AND WAGES

"The sum which it will be possible for the *entrepreneur* to pay in wages of labour is limited by the advantages which he derives from that labour." PIERSON¹.

OF those who contribute to the productive effort of an industrial group, some play what may be described as the more passive part, while others assist actively in the various departments of the business. To the former class belong landlords and capitalists as such, to the latter belong the various classes of workers, from the heads of the firm or the directors at one end of the ladder, to the youngest "half-timer" at the other.

The workers may roughly be divided into four classes :—

- (a) **Business organizers.**
- (b) **Higher paid workers** such as managers of departments, chief clerks, etc.
- (c) **Skilled labourers.**
- (d) **Unskilled labourers.**

Each worker derives from the net product an income which for convenience may be described either as salary or as wages. Between these two terms there is probably very little real difference of meaning; a usual distinction to make, however, is to regard salaries as being reckoned by the year, and wages by shorter periods (such as the hour, the day or the week), or even by the amount of work done.

¹ Dr N. G. Pierson, a Dutch economist and statesman, formerly Prime Minister of Holland.

At first sight it seems as if the incomes of employer and employed would necessarily come under separate heads, but as a matter of fact this would be making a very artificial distinction. In each case the income is a reward for personal effort; such effort may be of many different kinds and be very differently rewarded according to circumstances, but all the same it is the part played by *man* in production, and the income is a payment for the services he renders.

Income of the Business Organizer.

The distinction already drawn between the two forms of business enterprise—the Private Business and the Joint Stock Company—needs to be borne in mind when dealing with the incomes of those who are responsible for the conduct of business. In the latter case the income of the business organizer takes the form of a salary or fixed annual payment, though he may in addition receive some part of the profits. In the former case the business organizer owns the business, so he can hardly be said to pay himself a salary. A part of his income is undoubtedly a payment for the work of organization, but he does not receive any definite sum for such services. If the business failed to yield him such an income as he thought his abilities ought to command, he would probably consider the desirability of taking up some other business. This distinction may be summed up as follows:—Business Organization is a service rewarded by a share in distribution. The organizer adds to the productivity of the industrial effort and theoretically his income is that part of the produce which may be said to be due to his own effort. In the private business this is not distinguished from the rest of his income and therefore seems incapable of accurate measurement. In the case of the Joint Stock Company it is different. There the organizer's ability is regarded as

having a market value and his salary depends on the demand for his services and the available supply of persons capable of doing the work. Such a salary does not necessarily equal the amount which may be said to have been added to the product by him. It cannot exceed that amount but it may fall considerably short of it.

Salaries in General.

The incomes of the various salaried members of an industrial group—such as managers of departments, officials, higher paid clerks, etc., may be conveniently divided into two groups according to the qualifications necessary for the different posts.

(i) For some positions a high degree of skill, of knowledge, or of experience is required. According to the rarity of such qualities so will be the remuneration. The supply of men and women capable of undertaking the work is often limited by the expense of training and by the lack of opportunity of gaining the needed experience. The salaries of such posts vary enormously but are frequently high.

(ii) For the majority of salaried positions a good general education is the first requirement. In addition, a certain acquaintance with business routine, a capacity for directing the work of others, or an intimate acquaintance with the practical side of factory or workshop, would probably be needed. But the supply of workers so qualified is often very large, far larger at times than the demand. The salaries of such posts are therefore correspondingly low, but low as the salary very often is, for every vacancy there will frequently be hundreds of applicants.

Wages of Skilled Labour.

A hundred years ago economic writers as a whole believed that wages were always at the level of bare subsistence. and that they were kept there by economic

forces which could not be hindered or turned aside. Wages were certainly very low in those days, often hardly enough to provide the workers with absolute necessities. This was the result of unrestrained competition. A rapidly increasing population overstocked the labour market, and a badly administered Poor Law¹ weakened self-reliance and self-respect. To improve the conditions of labour and more especially to put an end to that competition between the workers which was one cause of the deplorably low wages, the Trade Union movement was set on foot. By combination working men were able to put a reserve price upon their labour, their bargaining power was greatly increased and as a consequence higher wages were obtained. Skilled labour is so well organized to-day that in many trades the wage contract is not settled by a private bargain between employer and employed but by collective bargaining between the Association of the employers and the Trade Union officials.

Wages of Unskilled Labour.

It was a long time before unskilled labour benefited at all by the advantages to be derived from combination and organization, and even at the present day it is only in a few of the unskilled trades that Unions have been formed. Even where there is organization the wages of such labour are very low because the work, requiring no skill or training, can be done by anyone possessing the necessary physical strength and the most ordinary intelligence. In cases where there is no Trade Union, the unskilled worker must make the best terms he can for his labour, and as the labour market is always overstocked,

¹ Under the so-called Speenhamland Act of 1795, the Justices of the Peace were empowered to supplement wages by making "allowances" whenever the wages fell below a certain sum. The labourer, in consequence, was often ready to take an extremely low wage, because he knew it would be made up to him out of the Poor Rates.

the wages he can command are hardly likely to provide him with more than the barest necessities of life, while employment is very irregular.

THE REWARD OF LABOUR.

The determination of wages is a subject which needs very careful study. Wages are a payment for certain kinds of service. Such services have a market value, and this value depends on the interaction of Demand and Supply. The forces which influence Demand and Supply must be considered at some length before the results of their interaction can be finally discussed.

The Demand for Labour.

The demand for labour closely resembles the demand for commodities in general. Employers demand labour because they expect to obtain some satisfaction or advantage from so doing. The number of workers that any employer would engage depends on what he has to pay them for their services. If they ask more than their services are worth to him he refuses to employ them. Thus the demand for labour depends on the wage asked, and (as explained when dealing with the Theory of Value) there is no such thing as demand for the services of labour without reference to the price of such services.

The amount of advantage which an employer derives from engaging any particular worker is the difference between what that worker adds to the net product and what he receives as wages. This may be represented then as a subtraction sum:—

Net product from employing 201 men	=	£25,110
Net product from employing 200 men	=	25,000
Addition to product	-	110
Wages	-	100
Advantage of 201st worker	=	£10

Generally speaking it may be assumed that an employer will continue to employ more men so long as there is any advantage to be derived from so doing. If he does so, the last man he is willing to employ is the man who adds to the product just about as much as he receives in wages. This man may be called the marginal labourer because the employer is almost in doubt as to whether he will engage him—he is just on the margin, so to speak, between employment and unemployment.

Why the additional labourers should be less profitable to the employer than those previously engaged needs explanation. We may assume that all are equally skilful, yet it is a fact that there is a limit to the number of workers that an employer will demand at any given wage. From what was said in Chapter VII as to the advantages of large scale production it would seem that the more labourers there were employed the greater would be the advantage to the employer. So it might be if the advantage consisted only in the quantity of goods produced. But the advantage comes from the sale of the goods. There is no advantage in having warehouses filled with goods that cannot find purchasers at a remunerative price. If more goods are being produced than are being sold, the price must be lowered, and this may make the additional amount of goods produced an actual disadvantage to the manufacturers. The employer therefore would be deriving a disadvantage instead of an advantage from the additional labour required, his demand for labour at the current rate of wages would diminish, and one of two things would become necessary—he must either dismiss men or he must lower wages.

To simplify the problem let us suppose that a certain firm is employing 100 men, paying them each a weekly wage of £2, i.e. roughly speaking, at the rate of £100 a year each. Trade becomes brisk, prices rise, and in

consequence the employers decide to take on more men. How many new workers will they engage? This depends on the effect which the increased supply of the commodity will have on the demand of the public for it; for if more goods were produced the price might fall, in which case the advantage of employing more men would soon disappear.

The diminishing advantage of employing more men is indicated in the following table:—

Assuming that 100 men are already engaged at £100 a year, and that more men could be secured at the same wage, it may have been calculated that

5 more men would add £800 to the product = £160 a man					
a second 5	„	700	„	= 140	„
a third 5	„	600	„	= 120	„
a fourth 5	„	500	„	= 100	„
a fifth 5	„	400	„	= 80	„

and so on.

The fourth 5 added per man £100, but this is the amount they were paid in wages, there is therefore no profit to be gained by employing them. If a fifth 5 were engaged they would receive more than they added to the product and hence the employers would lose by taking them on. The total number of men employed by the firm will probably be 120, that is, under the existing trade conditions their demand for men at £2 a week is 120. The last 5 added are the **marginal labourers**, and the **marginal productivity** of labour when 120 are employed is £2 a week—that is to say, the last labourer it was worth the manufacturer's while to employ added £2 a week to the product.

The actual profit derived from engaging the last 5 men was nil, but the advantage of employing 120 men may have been considerable.

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Profit when 115 men employed estimated at £5000

"	"	120	"	"	"	5000
Additional profit						nil.

The profit of £5000 suggests a very prosperous state of affairs, and if this is not peculiar to the business in question, but is fairly general throughout the trade, the workers as a body, acting through their Trade Union, are likely to demand higher wages. They refuse to work for less than £2. 10s. a week (roughly speaking, £125 a year), how will this affect the demand for labour? On referring to the table we shall see that the third 5 added £120 per man; it is hardly likely then, that these would be engaged at a cost of £125 each.

The second 5 added £140 per man; the number employed therefore would not be less than 110, and, if the men were engaged in groups of 5, it would be hardly likely to go beyond this figure. The high wages are in their turn likely to cause a rise in prices and these again will affect the demand for goods and the demand for the labour required to make them.

It has been shown that the demand for labour is dependent on the profitableness of business. This depends mainly on two things:—(i) productive efficiency, (ii) price. Employers and employed are jointly responsible for the former, the market conditions regulate the latter. As has already been said, it is no use making goods, however efficient the productive effort may be, unless people are willing to buy them. Since then, in the long run only those goods will be produced for which the public is willing to pay a remunerative price, the public may be said to be the ultimate employer of labour. **Labour is the demand for labour.** It is by our labour that we get the income which enables us to demand the labour of others. The employer is in fact only a sort of middleman.

He employs labour if the public will buy his goods, and what he can pay in wages depends on what the public will pay him. This brings us back to the fundamental idea of Distribution, viz. that what there is to distribute depends on the amount of the produce sold and the price at which it is sold. Each worker gets a share of the joint income so derived, and this is his individual income. The sum of the individual incomes cannot exceed the amount that is available for Distribution.

Supply of Labour.

We must now approach the question from the side of the labourer and examine the conditions which affect the supply of his services. In the first place it will be noticed that at any given moment the supply of labour of any particular kind cannot exceed the number of people able to do the work in question. If the task needed unskilled labour it might be said that all able-bodied workers formed a possible source of supply. But the supply of skilled labour is much more restricted. If the demand for skilled labour of a particular kind exceeded the supply, it is probable that many just starting in life would be induced to take up this trade, and that some workers in other trades, especially if the work were very similar, would change over to it. But some trades are difficult to learn, and the expert workman has acquired his skill only by years of constant practice, so that it may take a long time to increase the supply of labour in any given trade.

By the term **supply of labour** is meant, not the number of persons qualified to do the work, but the number of qualified persons willing to do the work at a particular rate of wages. The number able to do the work is only the extreme limit of supply. Thus, as with commodities, supply cannot be considered apart from price. In the long run, too, it may be said that the supply of labour

varies with the price that can be obtained for its services. If the wage offered fell below a certain amount, there might be no supply at all. On the other hand the higher the wage, the greater the inducement to take up that particular line of work and the greater therefore is likely to be the supply.

With regard to inducement it is worth noticing that what really attracts the supply of labour is not the money wage, but what that money will buy. A distinction has to be made between **Money Wages** and **Real Wages**. The former is the amount of money that is given in exchange for the services of labour, the latter is the amount of food, clothing, shelter and enjoyment that can be obtained by means of that money. Real wages then depend on the prices of things in general, on what is called the **general level of prices**. If prices rise but money wages remain the same, the inducement to labour is diminished. Here we find a difference between the employer's point of view and that of the employed. The employer measures wages by the money he has to pay out, the employed by the extent to which his wants can be satisfied.

The greatest service, perhaps, rendered by Trade Unions has been to give the workers a minimum or reserve price for their labour. Below this minimum there is no supply. In this way a certain standard of living is maintained, and the standard of efficiency is raised. The minimum fixed by a Trade Union for any particular class of work is based on three main considerations :—

- (i) the cost of maintaining a certain standard of comfort ;
- (ii) the character of the occupation ;
- (iii) the time and money spent in acquiring the necessary skill.

In occupations which are both pleasant and easy to learn,

the minimum would depend entirely on the first of these. In coal-mining the first two would have to be taken into account. In engineering and other trades in which a high degree of technical skill is required, all three would be of importance.

The Determination of Wages.

The fact that in the case of most skilled occupations the wage contract is the result of a collective bargain between employers and employed, suggests that there is a close resemblance between the determination of the wages of labour and the determination of price when there is but one buyer and one seller¹.

The employer's maximum is a question of the productivity of labour, and, as shown earlier in the chapter, the productivity of labour varies very much in different businesses and according to the number of men employed. If all the available men are to be employed, the wage must not be higher than the amount the last worker that could be engaged would add to the product².

The Trade Union minimum is based on the considerations just mentioned. The standard of comfort, however, is not a fixed one. The constant aim is to raise it. But whether it can be raised or not depends on the productivity of labour, and on the general level of prices. In times of general prosperity wages will probably be higher, but if this state of things is only temporary, they are likely to fall again when trade is bad, with a result that the standard of comfort is no higher. Wages at the present time are higher than they were 10 years ago, but the cost of living has increased even more, so that in effect, the standard of comfort has tended to go down.

¹ See Example III on p. 104.

² The reader should bear in mind throughout this argument that what is represented is not necessarily true in every individual case, but is the general tendency in the industrial world as a whole.

In Example III of Chapter IX it was pointed out that if the seller's minimum was greater than the buyer's maximum, no sale resulted. Similarly in the case of wages, if the workers demand a higher wage than the trade can afford, i.e. if their minimum is higher than the employers' maximum¹, no labour will be employed, the works will have to be closed. If, on the other hand, the workers' minimum is less than the employers' maximum there is room for bargaining, and the rate of wages determined upon will depend on the relative bargaining strength of the two parties.

The strength of the workers is considerably affected by their numbers. If labour of a particular kind is very plentiful, standing out for a wage above the minimum would probably mean that a large number of workers would be unemployed. On the other hand if the industry was growing faster than the numbers of those engaged in it, the workers could secure the best possible terms. This can be best illustrated by taking a simple example. If in a particular trade there were 10,000 skilled workers capable of doing a certain kind of work, but the limits set by productivity were as follows:—

If wage were 10d.	an hour	5000 could be employed
„ 9½d.	„	8000 „
„ 9d.	„	10,000 „

it would be evident that the workers would have to choose between

- (a) accepting 9d., and having all their men employed,
- (b) accepting 9½d., and having to support 2000 of their number in idleness.
- (c) accepting 10d. and having half their number unemployed.

¹ This maximum is not what any one particular employer could afford to give, but what could be paid by employers as a whole if fluctuations of trade were taken into account.

The conditions upon which the maximum is calculated are constantly changing, but the rates of wages fixed by agreement hold good for the period of the contract. This may be to the advantage of the employers or it may be the reverse; in any case they take this risk. An increase in the price of the raw material and fuel or a fall in the price of the finished article makes the labour less productive, a decrease in any of the expenses of manufacturing or a rise in the price of the finished article would make the labour more productive.

In conclusion, it is necessary to emphasize one very important fact:—**Wages are paid because work is done.** The value of the service depends on the value of the product, and the value of the product is measured not by the amount of labour expended on it, but by the price that people in general are willing to pay for it.

CHAPTER XIV

INTEREST AND PROFITS

“Interest is the return from the fund of capital; profits are the return from the conduct of business enterprise....Interest is a part of cost; profit is a surplus above cost.”—SELIGMAN¹.

THE last two chapters have been concerned with the incomes of landlords, workers and organizers. It only remains, therefore, to find an answer to the question—What determines the share of the product which forms the income of the capitalist?

The income of the capitalist is a reward for two distinct services,

- (a) the service of capital,
- (b) the service of enterprise.

¹ See footnote to page 56.

The former of these has a definite market value generally known as the **Rate of Interest**, the latter depends for its reward on the surplus or **Profits** which may or may not result from the industrial effort.

The distinction becomes clear when a concrete example is taken. In a Joint Stock Company the capital is provided by the shareholders who for this service of providing capital receive out of the net product a payment in proportion to the amount of capital each has subscribed. The shareholders however do not all take the same amount of risk and some even may be said to take no risks at all. There are generally speaking three classes of shareholders:—

(i) The **Debenture holders**—these take practically no risks and receive for the use of their capital a small fixed rate of interest.

(ii) The **Preference shareholders**—these take a certain amount of risk for which they are rewarded by the payment (when the proceeds of the business permit of it) of a somewhat higher rate of interest than the *debenture* holders receive.

(iii) The **Ordinary shareholders**—these are the real risk-takers. The company has undertaken to pay a certain rate of interest to the *debenture* holders, and, if possible, a certain higher rate to the *preference* shareholders, but no promise to pay any definite amount has been made to the *ordinary* shareholders. These take their chance of there being any of the net product left over after the other two classes have been paid. If there is anything left over it comes to them. Whatever they receive over and above what might be regarded as the market price of the service they render is the reward of enterprise. This additional amount is **not Interest but Profits**. It is a compensation for the special risks that are

run, and the possibility of there being a surplus available for this purpose is the real incentive to business enterprise.

In reckoning the expenses of production with a view to fixing the minimum price at which the goods could be sold, the remuneration of capital is included, and the rate of interest allowed depends on the nature of the risks that are run. Let us take by way of example a certain company with a capital of £100,000. Of this, £10,000 is *Debentures*, on which 3% has been guaranteed, £40,000 is *Preference* stock which is to receive 5% and £50,000 is *Ordinary* stock. Since the *ordinary* shareholders would be the first to suffer if business was bad, it may be supposed that their remuneration would be estimated at say 7%. The amount of interest reckoned in the expenses of production would thus be:—

	£
On £10,000 3% Debentures	Interest = 300
On £40,000 5% Preference Stock	„ = 2000
On £50,000 Ordinary Stock (@ 7%)	„ = 3500
Total Interest	<u>£5800</u>

If at the end of the year, when the accounts of the company are balanced up, it is found that after paying rent, wages and salaries, there is only enough over to pay £3800 as interest, the £2000 that is short will come off the income of the *ordinary* shareholders and they will only receive £1500 or interest at the rate of 3%. If on the other hand business has been good and there is enough over to pay £7300, the additional £1500 will be added to the share of the owners of *ordinary* stock, who will thus get 10% instead of 7%. This additional 3% goes by the name of **Profits**.

Profits then is the net surplus which remains after all expenses of production have been paid, including interest at certain rates calculated according to the character of the stock. **Profits** is an additional income to those taking full

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risks, compensating them for the possibility of their not receiving any income at all for their capital and their enterprise.

DISTRIBUTION of the NET PRODUCT OF INDUSTRY

Rent of Landlord
Wages and Salaries of Employees
Salaries of Organizers
Interest on Debentures
„ on Preference Stock
„ on Ordinary Stock
PROFITS

If the business that we have taken as our example instead of being a Joint Stock Company had been a *private*

undertaking, the distinction between interest and profits would not be quite so clear, because they are both paid to the same persons. Let us suppose that the business is conducted by two partners, each owning half the capital. Each partner's income will be a reward for three services:—

(1) *Organization*, (2) *Capital*, (3) *Enterprise*.

For the first service the partners may be supposed to share the amount which in the Joint Stock Company was paid to the directors and the manager in the form of salaries. For the second and third services they share the whole of the sum that was before available for interest and profits. Interest on their capital they will no doubt reckon at some fixed rate, say 6%, and the remainder, the net surplus, they will regard as profits. Taking the figures given above¹, the incomes of the partners would work out as follows:—

Amount available for division between them = £7300 + the sum which in the case of the Joint Stock Company was paid out as salaries to directors, etc., say £5000 - - - = £12,300

Each partner receives therefore - - £6150

which may be assumed to be made up as follows:—

Salary as organizer	-	-	£2500
Interest on £50,000 at 6%			3000
Profits of enterprise	-	-	650
			<u>£6150</u>

Since profits is the balance which remains over when all the expenses of production have been met, it is evident that everything will tend to increase profits that either diminishes expenditure or increases revenue. For example, expenditure would be diminished if less were paid for raw

¹ See page 171.

material, for rent, for wages, for interest, or if there were any saving in the working expenses of any department of the business. Revenue would be increased if there were greater efficiency or if the goods realized higher prices. But it must be remembered that neither of these alone necessarily increases profits. Expenses may be less but revenue may also be less, in which case the one may counterbalance the other.

That there are any profits at all is mainly due to three causes:—

1. Expenses are for the most part incurred before the goods are sold. Contracts for wages, etc., are made in advance and are based on an estimate of the probable results of trading. If these results were overestimated, the expenses might exceed the revenue and the business might fail altogether. The employer therefore will try to be on the safe side, and hence the chances are that there will prove to be a surplus, though the attempts of rivals to obtain customers by underselling will tend to reduce this surplus within comparatively small limits.

2. The contracts for wages, etc., are based on the supposition that the goods will realize a certain price. But prices are subject to fluctuations, and hence the actual results are very difficult to forecast. In this way also profits may arise, though it is equally possible that prices may fall and that there may be a loss.

3. In many businesses there is some element of monopoly, that is to say some special advantages are enjoyed which are not shared by rivals. These advantages may be of two kinds:—

- (a) Advantages in production due to large scale, better machinery, patent rights, etc., which tend to diminish expenses.
- (b) Advantages in the market which enable the producer to fix his own price.

Of these three causes of profits the last is perhaps at the present day the one that plays the most conspicuous part. Large profits it is true are often made in consequence of a sudden rise in prices, but such gains are very occasional and are not infrequently counterbalanced by loss at some other time. Where, however, large profits are regularly secured, it may be assumed with a certain amount of probability that those who make them are enjoying some kind of monopolistic advantage.

Interest.

So far we have assumed the interest to be at a given rate, now we must consider how the rate of interest is determined.

Interest may be defined as "the price paid for the services of capital." But this definition is not very complete as it is only looking at the matter from the side of the borrower or user of capital. To the *borrower* the services of capital depend on the use to which it can be put and on the advantage to be derived from that use. The *lender* of capital, on the other hand, the *capitalist* as he is called, looks upon interest as payment for the service rendered by him. He has wealth which he can use in the immediate satisfaction of his wants. But for various reasons he decides to postpone this satisfaction. Instead of consuming his wealth¹ he applies it to some productive purpose, that is his wealth takes the form of capital. This then is the service he renders to Production. Capital is needed; capital only exists when the owners of wealth postpone its consumption. The capitalist renders his service by *waiting*, and interest has been called *the price of waiting*².

¹ To consume wealth is to use it in the direct satisfaction of wants.

² "Interest is the price paid for an independent and elementary factor of production which may be called either waiting or use of capital, according to the point of view from which it is looked at." Prof. G. Cassel (of Stockholm), *The Nature and Necessity of Interest*.

These two points of view may be described as the **Demand side** and the **Supply side**, and the interaction of the forces which influence borrowers and lenders results in a price for the service of capital—the **Rate of Interest**.

On the *Demand* side the main consideration is
Capital and the advantage of using it.

On the *Supply* side the main consideration is

The Capitalist and the inducement to him to lend.

The Demand for Capital. Capital is demanded because there is an advantage to be gained from its employment. Just as in the case of labour, there is a limit to the amount that will be demanded, because if an industry is conducted on too large a scale for the market, the goods produced will not find buyers at a remunerative price. Beyond a certain amount the advantage to be derived from the use of capital will diminish until at a given rate of interest it is only just worth the producer's while to borrow. The higher the rate of interest the less is he inclined to borrow and *vice versa*. An example will make this clearer. In a particular business the advantage derived per cent. from the employment of £100,000 capital was 5. More capital was then borrowed but the advantage of a second £100,000 was only $4\frac{1}{2}$. The manufacturer calculated that if he continued to borrow, the advantage of adding further amounts of capital would be even less. Thus:—

Capital £	Advantage of last portion borrowed
100,000	5 per cent.
200,000	$4\frac{1}{2}$ "
300,000	4 "
600,000	$3\frac{1}{2}$ "
800,000	3 "
1,000,000	$2\frac{1}{2}$ "

How much will he borrow? That depends on the rate of interest charged. If he could borrow at 4%, he would employ a capital of £300,000; if he could borrow at $3\frac{1}{2}\%$, he would employ a capital of £600,000 and so on.

The conditions of demand then are mainly two:—

(1) Capital is only borrowed when there is an advantage to be gained by so doing.

(2) The amount of capital borrowed depends on the rate of interest that must be paid for its use.

The Supply of Capital. In the Middle Ages the capitalist hardly existed. The receiving of interest (usury as it was called) was forbidden and property was far from secure. There was therefore no inducement to lend, and, it may be added, there was very little opportunity for the productive use of capital. Even where there is opportunity, capital is not forthcoming without inducement and the two elements of inducement are

(a) rate of interest, and

(b) security.

But it must be remembered that some are much more easily induced to save than others. This difference is sometimes national. Adam Smith tells us that in his day the Dutch were content with a very low rate of interest. "The Government there," he says, when speaking of Holland, "borrow at two per cent., and private people of good credit at three." In England at the same time the current rate was about half as much again. The French people also are as a rule very thrifty. They save and lend even when the rate of interest is very low.

Generally speaking we may say that the amount of capital that would be forthcoming at any given time depends on the rate of interest that would be paid for its use. Let us take by way of example the case of a man with £1000 a year. He feels it his duty to save a part of

his income and even if the rate of interest were only $2\frac{1}{2}\%$ he would put by each year £200. If the rate of interest were 3% he would be induced to do without something and to save another £50. Each rise in the rate of interest would lead him to save still more until if 5% were offered he might even put by £500 a year. If we now apply this on a much larger scale—we might draw up the following table:—

Rate of Interest	Amount of Capital forthcoming
	£
5 per cent.	1,000,000
$4\frac{1}{2}$ "	800,000
4 "	600,000
$3\frac{1}{2}$ "	300,000
3 "	200,000
$2\frac{1}{2}$ "	100,000

The **conditions of the supply of capital** can then be stated as follows:—

- (1) Capital is only forthcoming when there is sufficient inducement offered.
- (2) The amount of capital forthcoming depends on the rate of interest.

The Rate of Interest. Having considered the conditions of supply and demand we are now in a position to notice the interaction of these forces in the determination of a price for the use of capital. The tables already given can now be combined in one, thus:—

If the rate were 4% , *demand* would = £300,000 and *supply* would = £600,000. The stronger lenders would then offer to take less.

If the rate were $3\frac{1}{2}\%$, *demand* would = £600,000 and *supply* would = £300,000. The stronger borrowers would then offer to give more.

Thus the rate would be between $3\frac{1}{2}\%$ and 4% , and it is possible that at $3\frac{3}{4}\%$, £450,000 would be offered and £450,000 taken, in which case demand and supply would be in equilibrium.

It may further be assumed that the advantage of borrowing the last £150,000 of capital was exactly $3\frac{3}{4}\%$ (since £300,000 would have been borrowed at 4%) and that the inducement necessary to call forth the last £150,000 was also $3\frac{3}{4}\%$ (since £300,000 would have been lent at $3\frac{1}{2}\%$).

Demand		Supply
Amount of Capital that would be borrowed	Rate of Interest	Amount of Capital that would be lent
£		£
100,000	5 per cent.	1,000,000
200,000	$4\frac{1}{2}$ "	800,000
300,000	4 "	600,000
600,000	$3\frac{1}{2}$ "	300,000
800,000	3 "	200,000
1,000,000	$2\frac{1}{2}$ "	100,000

Throughout this argument nothing has been said about risks. In fact it has been assumed that the borrower ran no risk in lending. In most cases, however, the lending of capital does involve risk and this would be taken into account when any particular bargain for the use of capital was made. The character of the risks would affect both the rate the borrower was willing to give and the rate that the lender was willing to take, but the rate actually paid would be determined precisely in the same way as in the example given above.

Conclusion.

It has been shown that the income of the individual is a payment for service rendered. That this income may

take the form of Rent, Salaries, Wages, Interest or Profits. That in each of the first four cases the service rendered has a market price, which, like any other price, is determined by the interaction of the forces controlling Demand and Supply. That Profits is not determined in this way but is the net surplus which remains when all other claims have been satisfied.

Thus the net product of industry is distributed among those who have taken part in one way or another in the productive effort. Whether or not the existing system of Distribution satisfies the claims of justice or achieves the best social results is quite outside the scope of the present work. In dealing with this question as with others the aim has been to point out and to explain things of everyday occurrence, to illustrate and to arouse interest in the Economics of everyday life.

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¹ There is such a large number of standard works on economic subjects that selection is extremely difficult. The few given here are taken from those in most general use; beginners would find a larger list confusing. More advanced students will find an excellent bibliography in Seligman's *Principles of Economics*.

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